

1986

The sociology of agricultural development in West Malaysia: an analysis of peasant producers' rural-rural migration within the context of integrated agricultural development setting

Mohd. Isa Bin Haji Bakar
Iowa State University

Follow this and additional works at: <https://lib.dr.iastate.edu/rtd>



Part of the [Demography, Population, and Ecology Commons](#)

Recommended Citation

Bakar, Mohd. Isa Bin Haji, "The sociology of agricultural development in West Malaysia: an analysis of peasant producers' rural-rural migration within the context of integrated agricultural development setting" (1986). *Retrospective Theses and Dissertations*. 8004.
<https://lib.dr.iastate.edu/rtd/8004>

This Dissertation is brought to you for free and open access by the Iowa State University Capstones, Theses and Dissertations at Iowa State University Digital Repository. It has been accepted for inclusion in Retrospective Theses and Dissertations by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.

INFORMATION TO USERS

This reproduction was made from a copy of a manuscript sent to us for publication and microfilming. While the most advanced technology has been used to photograph and reproduce this manuscript, the quality of the reproduction is heavily dependent upon the quality of the material submitted. Pages in any manuscript may have indistinct print. In all cases the best available copy has been filmed.

The following explanation of techniques is provided to help clarify notations which may appear on this reproduction.

1. Manuscripts may not always be complete. When it is not possible to obtain missing pages, a note appears to indicate this.
2. When copyrighted materials are removed from the manuscript, a note appears to indicate this.
3. Oversize materials (maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left hand corner and continuing from left to right in equal sections with small overlaps. Each oversize page is also filmed as one exposure and is available, for an additional charge, as a standard 35mm slide or in black and white paper format.*
4. Most photographs reproduce acceptably on positive microfilm or microfiche but lack clarity on xerographic copies made from the microfilm. For an additional charge, all photographs are available in black and white standard 35mm slide format.*

*For more information about black and white slides or enlarged paper reproductions, please contact the Dissertations Customer Services Department.

UMI University
Microfilms
International

8615051

Haji Bakar, Mohd. Isa Bin

THE SOCIOLOGY OF AGRICULTURAL DEVELOPMENT IN WEST MALAYSIA:
AN ANALYSIS OF PEASANT PRODUCERS' RURAL-RURAL MIGRATION
WITHIN THE CONTEXT OF INTEGRATED AGRICULTURAL DEVELOPMENT
SETTING

Iowa State University

Ph.D. 1986

University
Microfilms
International 300 N. Zeeb Road, Ann Arbor, MI 48106

Copyright 1986

by

Haji Bakar, Mohd. Isa Bin

All Rights Reserved

PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs or pages _____
2. Colored illustrations, paper or print _____
3. Photographs with dark background _____
4. Illustrations are poor copy _____
5. Pages with black marks, not original copy _____
6. Print shows through as there is text on both sides of page _____
7. Indistinct, broken or small print on several pages ✓
8. Print exceeds margin requirements _____
9. Tightly bound copy with print lost in spine _____
10. Computer printout pages with indistinct print _____
11. Page(s) _____ lacking when material received, and not available from school or author.
12. Page(s) _____ seem to be missing in numbering only as text follows.
13. Two pages numbered _____. Text follows.
14. Curling and wrinkled pages _____
15. Dissertation contains pages with print at a slant, filmed as received _____
16. Other _____

University
Microfilms
International

The sociology of agricultural development in West Malaysia:
An analysis of peasant producers' rural-rural migration
within the context of integrated agricultural development setting

by

Mohd. Isa Bin Haji Bakar

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of the
Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Department: Sociology and Anthropology
Major: Rural Sociology

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1986

Copyright© Mohd. Isa Bin Haji Bakar, 1986. All rights reserved.

TABLE OF CONTENTS

	Page
DEDICATION	vii
CHAPTER 1. INTRODUCTION	1
Problem Statement	5
Objective of the Study	9
Significance of the Study	11
Organization of Dissertation	11
CHAPTER 2. WEST MALAYSIA	14
Peasant Societal System	19
The Sociology of Agriculture and Agricultural Development	28
Integrated Agricultural Development Projects (IADP) as a Strategy for Agricultural Development	33
The National Agricultural Policy	45
Summary and Conclusion	49
CHAPTER 3. LITERATURE REVIEW	54
Conceptualization of Migration	54
Definition of Migration	60
Social Integration	61
Factors Influencing Malay Peasants' Social Integration and as Determinants of Migration	67
Education	68
Age	70
Dependent children	73
Total family and kinship closeness	75

Farm size operation and land tenure status	78
Employment status	82
Political commitment	84
Access to development accelerators	86
Poverty status	89
Political participation	93
Social Integration and the Decision to Migrate	95
Summary and Conclusion	101
CHAPTER 4. THEORETICAL FRAMEWORK	104
Migration as a Social Behavior	104
Discriminating Behavior and Social Integration Model	108
Summary and Conclusion	112
CHAPTER 5. METHODS	115
The Data Source	115
Yan District of the Muda Area, Kedah	125
Trans-Perak IADP Area	128
Operationalization of Variables	130
Dependent Variables	131
Independent Variables	132
Hypotheses	133
The main hypothesis	133
Sub-hypotheses	134
Discriminant Analysis	136
CHAPTER 6. RESEARCH FINDINGS	140
Migrant and Non-Migrant Characteristics	140

Perceived social integration	140
Perceived political participation	141
Perceived access to development accelerators	141
Poverty status	144
Educational levels of attainment	144
Age	145
Dependent children	145
Total family	146
Perceived kinship closeness	146
Farm size operated	146
Land tenure status	147
Farm employment status	148
Political commitment	148
Discriminant Analysis	149
Univariate analysis	149
Multivariate analysis	153
Social Integration	160
Migrants' and Non-Migrants' Socio-economic Status Changes	170
Summary and Conclusion	174
CHAPTER 7. DISCUSSION	180
Inconsistency of Migration Determinants	181
Perceived social integration	181
Perceived political participation	183
Perceived access to development accelerators	184
Poverty status	186

Educational levels of attainment	188
Age	190
Dependent children	192
Total family and perceived kinship closeness	194
Farm size operated, land tenure and farm employment status	196
Political commitment	198
Factors Influencing Social Integration	200
Migrant and Non-migrant Socio-Economic Status Changes	205
Conclusion	207
CHAPTER 8. SUMMARY, POLICY IMPLICATIONS AND CONCLUSION	210
Summary	210
The problem	210
Method of investigation	211
Major findings	212
The inconsistency and discriminant function coefficients of the selected migration determinants	212
Factors influencing peasant producers' social integration into their community	213
The socio-economic status changes among and between the migrant and the non-migrant groups	215
The state of agricultural development and the promise of the National Agricultural Policy (NAP)	216
Lessons that could be learned from the spontaneous rural-rural migration phenomenon in West Malaysia	217
The study's contribution to the general theory of sociology	220

Limitations and Suggestions for Future Research	221
Policy Implications: Spontaneous Versus Organized Population Redistribution	223
Conclusion	227
BIBLIOGRAPHY	229
ACKNOWLEDGEMENTS	249
APPENDIX A: STATEMENTS USED FOR ATTITUDINAL VARIABLES	252
APPENDIX B: SUPPLEMENTARY TABLES	255
APPENDIX C: INTERVIEW SCHEDULE TO GENERATE THE DATA	269
APPENDIX D: COVER LETTER REGARDING THE USE OF HUMAN SUBJECTS	283

DEDICATION

This study is particularly dedicated to my late beloved mother, RADZIAH HAJI HASSAN, and beloved father, HAJI BAKAR HAJI AWANG, who have placed my education above all their worldly desires. Their close association to peasantry life manifested in the struggle for the family's survival as those of the peripatetic peasants who migrated in search of a greener field, triggers my interest in pursuing this fruitful undertaking. And to my loving wife, HASNAH HAJI HASSAN, also an off-spring of a peasant family, I dedicate this work for her understanding of my sympathy and appreciation to the cause of the Malaysian peasantry.

CHAPTER 1. INTRODUCTION

"In general, traditional societies are characterized by a type of social integration or solidarity that tied the individual into a system of kinship, political loyalty, and economic dependence conspiring against large-scale movements. In turn, attaining status and prestige through ascription, the distribution of rewards through kinship associations, loyalty to local chiefs, and the nature of socialization, fostered community or more specifically, tribal kinship identification, all of which impeded migration from one community to another and prevented the acceptance of 'strangers' from outside."

(Goldscheider, 1971:187-188)

Human migration or geographical mobility is one of the elements that can affect changes in the size and structure of a given population (Goldscheider, 1971:48-50). Fertility and mortality are the other two elements. Internal migration influences the size and structure of a population in various regional areas of a given nation (Shaw, 1975). One of the prominent effects of internal migration in the developing countries has been the rapid expansion of their primate cities (McGee, 1975; Jones, 1978; Pryor, 1979).

In view of the massive and pervasive nature of rural exodus to various townships and urban centers, a common sequel to this trend of migration has often been accompanied by a variety of problems precipitating within the townships and the urban centers of these countries. Conspicuous among these, according to Pryor (1979:108) and Drakakis-Smith (1979:292-294) is that the proliferation of squatter slums and the critical unemployment rate aggravate the existing complexity of urban planning.

For the past two decades, Jones (1978) asserts that internal migration has become a more important focus for social science research in the Southeast and East Asia regions. This exercise has found growing interest among local, as well as foreign researchers in West Malaysia since the mid 1960s. Studies on rural-rural (Fisk, 1964; Wikkramatileke, 1965; MacAndrew and Yamamoto, 1975; Kaplan et al., 1977; Baharin and Perera, 1977; Young, 1978; Sulaiman, 1981) and rural-urban migration (Nagata, 1974; McGee, 1975; Narayanan, 1975; Abdullah, 1976; Selvaratnam and Dissanayake, 1979; Pryor, 1979) have been undertaken by using both census and survey data.

Jones (1978:64) has succinctly argued however that an excessive concern with the "bureaucratic" migration apparent in officially sponsored resettlement projects, such as the transmigration program in Indonesia (Suratman and Guinness, 1977; Hardjono, 1977; Arndt, 1983), the FELDA schemes in Malaysia (Wikkramatileke, 1965; MacAndrew and Yamamoto, 1975; Baharin and Perera, 1977; Hashim, 1979), and the Mindanao settlement schemes in the Philippines (Wernstedt and Simkins, 1965; Fernandez II, 1975; Carino, 1979), have virtually inhibited insight into the nature, problems, and determinants of spontaneous rural-rural migration. The validity of such an argument is possible, and apparently plausible, in view of the simultaneity of the spontaneous rural-rural migration phenomenon and the officially sponsored rural resettlement program in West Malaysia (Fisk, 1964; Ali, 1975; Haji Bakar et al., 1979, 1980).

In his analysis of spontaneous rural-rural migration¹ of the Perak

state peasants to the Panchor area, Fisk (1964:18) asserts that there are purely social difficulties² which make a peasant reluctant to leave the community with which he is familiar. The spontaneous rural-rural migrants in his study had to deal with such difficulties while deciding to migrate.

In other studies (Haji Bakar et al., 1979, 1980), the persistent land tenure problems within the rice growing area of the state of Kedah initiated a massive exodus of rice peasant producers to Trans-Perak between 1965 and 1975. Although the majority of the migrants moved in search of rice farmland; to some, social problems, such as family feuds and frustration inherent in inequitable distribution of inheritance, sparked off the decision to migrate (Haji Bakar et al., 1980:127-128). Unfortunately, of the 1,500 peasant families who migrated to the area, about 400 families (Haji Bakar et al., 1979:14) were evicted on the grounds that their occupation of government land was illegal.

Spontaneous rural-rural migrants to the Trans-Perak area were also found to have originated from other districts in the states of Perak, Penang, Perlis, and Selangor (Haji Bakar et al., 1980:125). They consist of about 300 peasant families who currently cultivate rice farmland in the area.

Other cases of spontaneous rural-rural migration include the colonization of government land in Teluk Gong by 400 peasant families in 1967, and in Binjai Patah by about 1,000 peasant families two years later (Ali, 1975:158). Both areas are in the state of Selangor, and the peasant families were from within the state. In both cases, all of the

migrant peasant families met with drastic eviction by government authority.

The most recent spontaneous rural-rural migration has been in the state of Kelantan. By 1978 over 24,000 hectares of state land have been illegally colonized by the masses (Berita Harian, 1985). Although legal action has yet to be taken, stern warnings of eviction have been threatened by state authorities.

The most fundamental reasons given for spontaneous rural-urban migration have been associated with the migrants' employment and high income needs (Narayanan, 1975; Abdullah, 1976; Selvaratnam and Dissanayake, 1979). In addition, higher educational attainment and younger adulthood ages (between 24 to 30 years old) have been found to be universal rural-urban migration determinants (Kaplan et al., 1977; Selvaratnam and Dissanayake, 1979; Pryor, 1979). Subsequently, by placing rural-rural and rural-urban migration as an internal migration category, the above determinants fail to universally hold as determinants of migration. Young (1978) and Aminuddin Sulaiman (1981) have discovered that for rural-rural migrants, ages tend to older, and educational levels posed no significant influence on their decision to migrate.

Another variable that has often been thought to be a universal determinant of migration is employment status (Shaw, 1975). Contrary to this, Hairi Abdullah (1976) asserts that among the rural-urban migrants to Bandar Maharani in the state of Johore, West Malaysia, more than half of the 131 sampled were fully employed.

Problem Statement

Migration, both international and internal, is a selective process (Shaw, 1975). While there is a notion that migration differentials usually revolve around the economic needs of individual migrants (Todaro, 1976), Goldscheider (1971) maintains that migration has neither a biological referent nor uniform processes, and in contrast to fertility, it is not restricted biologically to one sex or to one age group. Socially, however, it may have some forms of constraints.

Contrary to Todaro's (1976) claim that economic factors are the only reasons why people move, Sofranko and Williams (1980), Goldscheider (1971, 1984), and Campbell and Garkovich (1984) have strongly argued that other factors such as social, political, cultural, and demography have important bearings on the individual's decision to migrate. In his analysis of the costs and benefits of human migration, Sjaastad (1962) maintains that both the social and economic aspects are considered by individuals in their migration decision-making. De Jong and Gardner (1981) have fully supported this analysis.

Despite the persistence of a number of migration studies generalizing various determinants of migration among human societies (Ritchey, 1976), the consistency and generalizability of these determinants are still issues that remain to be solved (Bogue, 1959; Pryor, 1979). While certain determinants have been found to influence the decision to migrate within certain societies at certain time periods, Goldscheider (1971:302) argues that consistency in migration differentials across societies is still lacking. However, the author

seems to agree with Bogue's (1959) and Lee's (1966) explicit admonition that age, which entails an association with the life cycle tends to have some degree of consistency as a determinant of migration (Goldscheider, 1971).

Apparently, the inconsistency emanating within migration selectivity, differentials, and determinants, has precipitated an unending quandary in the formulation of a migration theory. This could be the main reason why Mangalam and Schwarzweller (1970) maintain that a sociological theory of migration, which can meet the stringent demand of a formal theory, is not likely to materialize in the near future. In addition, Pryor (1979) still questions the advisability of generalizing existing migration theories developed for developed countries and applied to developing societies.

A potential solution to the above argument has been proposed by Goldscheider (1971). He hypothesized that social integration is inversely related to the decision to migrate among the migrants. In this perspective, various other factors such as kinship ties (Gallin and Gallin, 1980; Rossi, 1980; Abeysekera, 1984) personal or social ties (Speare, 1974; Bach and Smith, 1977; Rossi, 1980; Goldscheider, 1984), and socio-political and economic participation (Glasgow and Sofranko, 1980; Gallin and Gallin, 1980; Hoffmann-Nowotny, 1981; Choi, 1984; Abeysekera, 1984), age, educational and occupational status (Goldscheider, 1971) influence the degree of social integration of individuals to their community, as well as discriminate between the migrants and non-migrants.

The notion that social integration affects the decision to migrate (Goldscheider, 1971) is plausible because it offer relevant explanations as to why certain determinants of migration are inconsistent for some studies, at certain time periods and across societies. Shaw (1975:17-39) asserts that the inconsistency or irregularity of various migration determinants such as age (Prasad and Johnson, 1964; Miller, 1966; Beshar and Nishura, 1961), sex differentials (Tarver, 1961; Hutchinson, 1963; Shryock, 1964), marital status (Blanco, 1963; Caldwell, 1970; Hollingsworth, 1970) family status (Caldwell, 1970; Long, 1973), and occupational differentials (Taeuber and Taeuber, 1965) warrant some explanations. One way to provide these is by looking at their discriminant functions.

Complicating the situation further, Goldscheider (1971) also argues that many studies have failed to include both the movers and the non-movers in their analysis. The author maintains that while attempts are made to delineate characteristics of the movers, the same effort must be afforded in outlining the characteristics of the non-movers (Goldscheider, 1971:50). In this regard, Goldscheider (1971:51) asserts that "in terms of analysis, non-movers are a significant comparative-contrast population in migration research."

An overemphasis on officially sponsored resettlement projects in internal migration studies in Malaysia (Jones, 1978) should be a good reason for change in the focus of internal migration studies in the future. Spontaneous rural-rural migration should be given equal weight. The inclusion of both potential movers and non-movers in any research

undertaking (Kaplan et al., 1977; Selvaratnam and Dissanayake, 1979; Sulaiman, 1981) is indeed desirable. Such studies may be able to provide an analysis of both the potential movers and the non-movers. But a drawback is their failure to delineate the actual determinants of migration and non-migration, and to provide insight into the nature and problems encountered by the actual migrants. While studies on the settlers selected by Federal Land Development Authority (FELDA) land development schemes (Wikkramatileke, 1965; MacAndrew and Yamamoto, 1975; Baharin and Perera, 1977) may expose the real nature of the determinants and problems of organized rural-rural migration, an overemphasis on such migration phenomenon tends to preclude the real voluntaristic aspect of migration decision-making, due to its induced overtone.

In addition to the drawbacks of the above approaches, most samples have examined only movers. As a result, a comparative-contrast sample for the study is absent (Goldscheider, 1971). By employing the discriminating behavior and social integration approach, the inconsistency of some determinants may be explained.

The applicability of the above model to the Malay rice peasant producers communities in West Malaysia is inherent in the similarities of the traditional socio-cultural elements that exist in Malay traditional societies and that of the African tribal clans. Among these clans, Goldscheider (1971) discovered that the prevailing kinship ties, social relations, socio-political relationships, the reward-sanction system, and the leader-member relationships promote social integration into the community. Among the Malay rice peasant producers communities,

Wilson (1967), Afifuddin Haji Omar (1972, 1973, 1978), Syed Husin Ali (1975, 1981), Bailey (1975, 1983), and Wan Hashim (1984) agree that all these elements exist. Subsequently, these factors influence the members level of social integration into their rice producing communities.

In various studies conducted in Taiwan (Gallin and Gallin, 1980), South Korea (Choi, 1984), Sri Lanka (Abeysekera, 1984), and developed societies (Speare, 1974; Bach and Smith, 1977; Rossi, 1980; Sofranko and Williams, 1980; Glasgow and Sofranko, 1980; Hoffmann-Nowotny, 1981), social integration has had a significant influence on the decision to migrate.

Since the irregularity of the determinants of migration have been discovered in various situations, time periods, and societies (Bogue, 1959; Shaw, 1975), the association between social integration and the decision to migrate could lead to less irregularity and inconsistency. This effort could achieve its objective because the model examines both actual movers and non-movers, thus strengthening the explanation of why some people move while others do not. In addition, having two different groups in the sample may also permit the use of discriminant analysis to look at which variable forms the strongest discriminant scores between the two groups.

Objective of the Study

Most studies of rural-rural migration in West Malaysia involve organized resettlement project participants. Studies that were conducted to elicit characteristics and determinants of migration among the spontaneous or voluntary migrants have mostly focused on the rural-

urban migration stream.

By filling in the existing gaps between rural-urban and rural-rural migration streams, the present study intends to elicit characteristics of the spontaneous rural-rural migrants and those of their non-migrant counterparts. By doing so, answers to the question of why some people move, while others do not, may eventually be revealed.

A discriminating behavior and social integration model will be employed in attempting to explain why some rice peasant producers out-migrated from their villages of origin, while others remained behind. Since the migration process occurred during the initial introduction of the green revolution package program³ to the area, the study will also emphasize the state of agricultural development in the area.

The dissertation will attempt to answer the following questions:

- 1) What are the discriminating characteristics that differentiate migrants from the non-migrants?
- 2) Are the migrants economically and socially better off at their place of destination as compared to their counterparts at their place of origin?
- 3) Which are the most salient factors that influence the degree of social integration of rice peasant producers in their village communities?
- 4) What is the status of agricultural development and type of structure of agriculture in which the rice peasants operate their farms, and what will the National Agricultural Policy (NAP) promise and assure them?
- 5) What sort of lessons could be learned from such a migration process?
- 6) Can there be consistency in the determinants of internal migration, especially in developing countries?

Significance of the Study

The study will have a significant relevance on the future work of other researchers interested in pursuing an understanding of the persistent inconsistencies in migration determinants. The model tested can be replicated or modified to apply to other situational contexts and communities.

. As far as the policy makers are concerned, the study will examine the genuine problems faced by rice peasants in struggling to achieve optimal farm size for securing an appropriate level of farm income to sustain their family above the subsistence level. The reasons for their illegal colonization of government land can be comprehensively understood.

Finally, a model which includes both the actual movers and non-movers in studying the migration phenomenon in West Malaysia has not been developed. This study will definitely provide a comparative-contrast analysis of why some people move and others prefer to remain behind.

Organization of Dissertation

The dissertation consists of eight chapters. Chapter One describes an orientation of the problem in its introductory section; the problem statement, and the objectives of the study. Chapter Two provides important background within which rice peasants conduct their production processes. An overview of West Malaysian peasant societal system, agricultural development strategies and issues related to Integrated Agricultural Development Projects (IADPs), are also

discussed.

As the dissertation's main concern is an analysis of the model of discriminating behavior and social integration among both the migrants and the non-migrants, a review of the literature, concerning previous community studies aimed at eliciting factors influencing social integration, is relevant. This review, and that on the determinants of migration, are presented in Chapter Three. The development of the discriminating behavior and social integration model follows in Chapter Four.

To test the model presented in Chapter Four, data collected in both areas of origin and destination in West Malaysia are used. Procedure for data collection, the origin of the data source, the study areas, operationalization of variables, hypotheses to be examined, and the statistical analysis selected for the data are elaborated in Chapter Five.

Chapter Six describes the findings of the study, while the discussion pertinent to all findings is presented in Chapter Seven. Finally, Chapter Eight discusses the summary, implications, and conclusion of the study in particular, and in general, the lessons that could be learned from the spontaneous rural migration phenomenon of the peasant producers in West Malaysia.

Footnotes

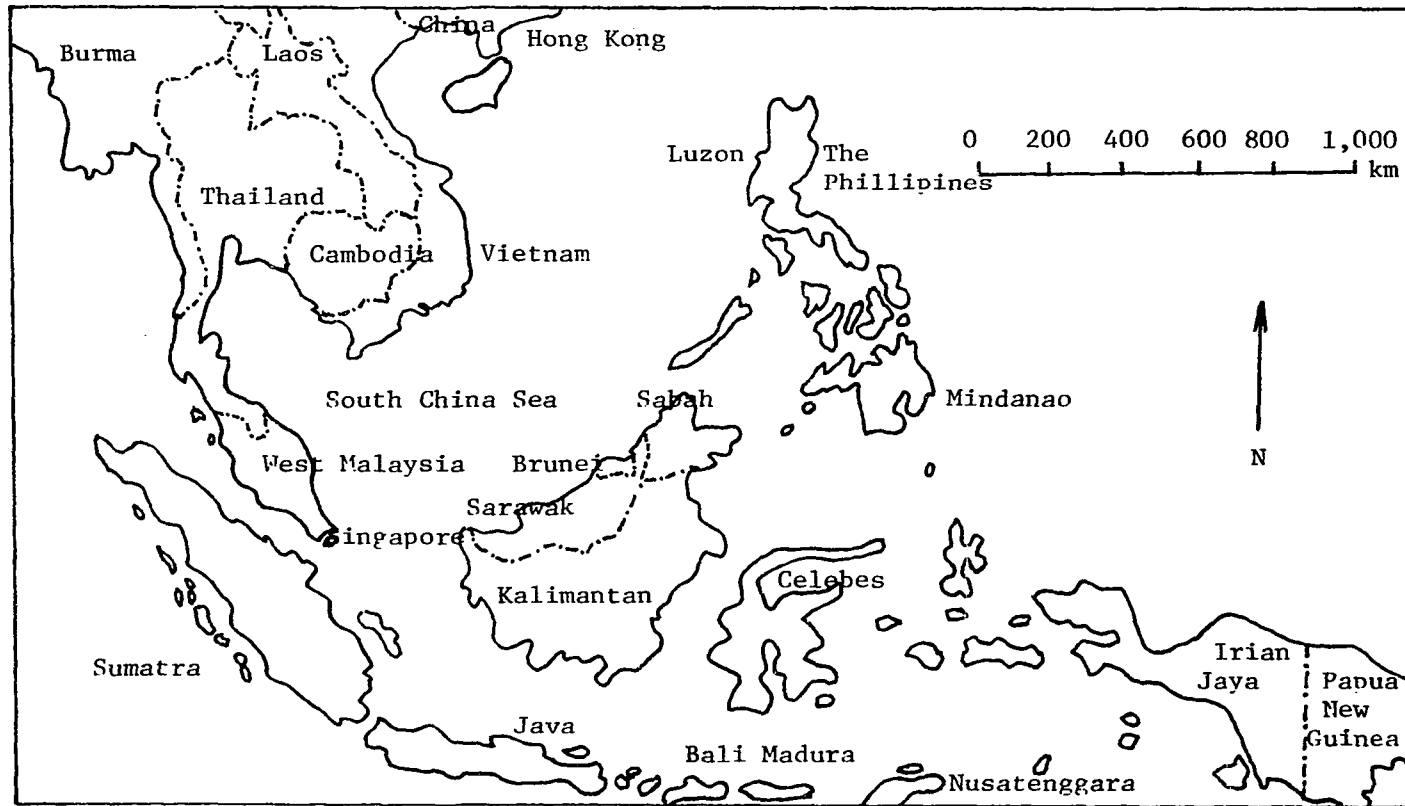
- 1) Spontaneous rural-rural migration is a voluntary movement among peasant producers to colonize undeveloped government land. This type of rural-rural migration differs from the organized and fully subsidized rural resettlement program participated by the Federal Land Development Authority (FELDA) and the Federal Land Consolidation and Rehabilitation Authority (FELCRA).
- 2) Among the difficulties which the movers experienced include, leaving some of their close relatives behind, being away from the environment with which they are familiar, leaving their close friends behind and the potential hardships, and problems in reestablishing themselves both socially and economically in the new environment.
- 3) In the works of Asian Development Bank (1971), Haji Omar (1978), and Gibbons et al. (1980, 1981), the package program of the green revolution implied the aggregation of various inputs for the improvement in crop yield in a given location. As in rice cultivation, the introduction of short-term maturing varieties can increase the planting season from one per year to two per year. In order to make this possible, a drainage and irrigation system is needed to supply water during the off-season crop. In addition to these two new technologies, chemical inputs such as pesticides, herbicides, and fertilizer are required to maintain a healthy crop, hence a good harvest.

CHAPTER 2. WEST MALAYSIA

The Federation of Malaysia, which is located in Southeast Asia, is, by comparison, larger than the state of New Mexico. It covers an area about 129,000 square miles (340,560 square kilometers). The area is composed of two geographical regions separated by the South China Sea. They are the Peninsular or West Malaysia and the states of Sabah and Sarawak which are commonly known as East Malaysia (Vreeland et al., 1977). West Malaysia represents 40 percent, or 50,000 square miles (132,000 square kilometers) of the total land area of the Federation of Malaysia (Selvadurai, 1978). Map 1 illustrates the location of the Federation and its two geographical regions.

The 1985 revised population estimates report that Malaysia has some 15,548,100 people (Malaysia, 1984:116). Of this total, 12,373,700 people reside in West Malaysia and the remainder reside in Sabah (1,201,100 people) and Sarawak (1,473,400) (Malaysia, 1984:120). Malaysia is a country with a multi-racial society (Young et al., 1980). Within West Malaysia, 55.3 percent of the total population are Malays, 33.8 percent are Chinese, 10.2 percent are Oriental Indians, and 0.7 percent are others including Eurasian minorities.

As a developing country, Malaysia enjoys vast natural resources, making it a relatively prosperous country (Gullick, 1963; Young et al., 1980). From the total 13.2 million hectares of land in West Malaysia, 2.9 million hectares are under cultivation, with another 2.4 million hectares waiting development (Selvadurai, 1978:1). Agriculture is predominant, and being the largest sector in the country, its



Map 1. Malaysia and Southeast Asia (Source: Pryor, 1979, p. 11)

contribution to the Gross Domestic Product, Foreign Exchange Earnings, and as a source for labor absorption, is very significant¹ (Malaysia, 1981).

Historically, West Malaysia has experienced a number of western colonizations (Bastin and Winks, 1966; Lim, 1977; Saunders, 1977). Though colonization is believed to have an exploitive effect on the colonized (Frank, 1967; Rhode, 1970; Amin, 1976), certain long-term beneficial outcomes do pervade the colonized societies (Lasker, 1945). Japanese occupation and the British Colonial Rule apparently triggered the way for the initial agricultural development of the country.

The Portuguese invaded and colonized Malacca in 1511 (Saunders, 1977). Although the occupation was strictly centered around Malacca, this region was considered the representative of the Malay Peninsula both in terms of military power and commercial activities.

In 1641, the region was overpowered by the Dutch in search of an ideal trading port (Saunders, 1977). However, in 1824 the Treaty of London had reallocated the Malay Peninsula to Britain and the Indonesian islands to Holland (Winstedt, 1962:62-63). This was the manifestation of the capitalists' way of mutual encroachment into their peripheries as Malacca was exchanged for Indonesia's Benculen by the British and the Dutch.

The British intervention and colonization of West Malaysia began with the founding of Penang by Francis Light in 1786 (Saunders, 1977). The island was ceded by the sultan of Kedah for British protection against Siamese and Acehnese attacks (Gullick, 1963). By 1874, the

states of Perak, Selangor, Pahang, and Negri Sembilan succumbed to British Rule.

The British had divided the administration of the Peninsula into three groups of states. Direct rule was administered to the Straits Settlements of Penang, Malacca, and Singapore (Purcell, 1965). The Federated Malay States of Perak, Pahang, Selangor, and Negri Sembilan were initiated in 1895 and each had a British Resident to administer state affairs other than the Malay Customs and religion. Kedah, Perlis, Kelantan, and Trengganu were acquired through an agreement with Siam (Thailand) in 1909, and by 1914, Johor was added to the so-called Unfederated Malay States. In these states, although the British were supposed to be only advisors to each sultan, in reality they acted as the real administrators of the states (Gullick, 1963).

The Japanese occupation during the Second World War (1941-1945) saw a short break between British Colonial Rule and independence in 1957. An important contribution to the development of Malayan agriculture during the period was the introduction of short-term maturing rice strains from Taiwan for double-cropping in the northern region of Province Wellesley (Lasker, 1945; Horrii, 1981). The success of this innovation had alleviated problems of food shortages at that time.

Much of the initial agricultural development in the Peninsula had been contributed by the British. This was a deliberate profit motive of the colonialists. British planters, Chinese capitalists, and a few Malay aristocrats benefited greatly from the introduction of rubber as an export crop (Gullick, 1963; Ali, 1981). The Malay peasants were

discouraged and deprived of taking part in the cultivation of this cash crop (Lim, 1977). They were involved in the food-crop production as suppliers of food cereals to the colonialists, their immigrant laborers, and the Chinese miners.

Various acts, pertinent to land matters and for the conversion of rice land to rubber holdings by the Malay peasants, were implemented during the period (Lim, 1977). To the British, the step taken was rational in order to ensure that enough food supplies were available for the population. Mills (1942) reported that experiences of food shortages and the need to monopolize commercial agriculture triggered the British to react harshly to the idea of allowing the Malay peasants to switch from rice to rubber cultivation. An important reinforcement to secure sufficiency in food production during the Colonial Rule was the establishment of the Department of Agriculture (DOA) in 1905, and the Drainage and Irrigation Department (DID) in 1932 (Mills, 1942; Lim, 1967; Lim, 1977). The department's first project was the Sungai Manik irrigation scheme, which was constructed for the purpose of increasing rice farmland, in addition to the Krian irrigation area developed earlier.

The pervasive nature of the spirit of nationalism, especially among the Malay commoners, forced the British to recognize Malaya's intention of gaining independence from the British Empire². However, the bloodless effort in fighting for independence had opened up the country for easy access to citizenship for the immigrant workers (Gullick, 1963). Caldwell (1977:13-37) implies that the British premeditatedly

talked the new government into accepting other ethnic groups as equal citizens of the new nation as an unequivocal condition for independence.

In 1961, the Prime Minister of the Federation of Malaya initiated a move to bring together Brunei, Sarawak, Singapore, and Sabah under the Federation of Malaysia (Purcell, 1965:185-203). Brunei withdrew during the early formation stage, thus leaving the eleven states in the Peninsula with Singapore, Sarawak and Sabah becoming members of the new Federation on September 16, 1963. However, in 1965, unavoidable circumstances resulted in Singapore's impeachment from the Federation of Malaysia.

Peasant Societal System

An overview of the Malaysian peasant societal system, within the context of agricultural change and development, is indeed relevant in attempting to appreciate their migration decision and the problems encountered both at the place of origin and destination. This subsection examines this intention while giving greater emphasis on rice peasant producers.

The fact that Malaysia has a multi-racial society (Young et al., 1980) is not in any way reflected in her peasant producers group. The majority of peasant producers in the country are Malays (Fisk, 1964; Swift, 1965; Selvadurai, 1978; Rudner, 1979; Ali, 1981), thus the homogeneous characteristics of the communities are apparently generalizable, especially when considering a type of occupational undertaking. A rice cultivation community from various regions of the country operates its socio-economic activities base on similar basic

principles influenced by similar cultural and religious factors (Bailey, 1983). The same is true for the rubber smallholders community or the fishermen community, or the mixed farming community. Being peasants, the differences among them revolve around what kind of crops they are cultivating, and the marketing and cultivation systems that govern their production processes.

To substantiate statistically, in 1970, Selvadurai (1978:12) maintained that 81.7 percent of the total agricultural households in West Malaysia were Malays, operating an average farm size of 1.66 hectares (4.1 acres), with the majority cultivating farms ranging between 0.40 hectares (one acre) and 2.00 hectares (5.00 acres). Their land tenure status was comprised of 63.7 percent owner-operators, 23.1 percent tenants, and 13.2 percent owner-tenants which indicates that a substantial number face the problem of landlessness.

Syed Husin Ali (1981:9) states that Malays have existed as a society for thousands of years in West Malaysia. Two types of Malays were described by Syed Husin Ali: The first group was the deutro-Malays who migrated from the Hoabinh area of Indochina some 3,000 to 5,000 years ago. They were people of small, but tough physique, dark skin and wooly hair (Ali, 1981:10). Their destination was not only the Malay Peninsula, but covered Sumatra and farther south to the Melanesian islands of the Pacific region.

The second group who migrated 1,500 to 3,000 years ago were known as the neolithic group, and were believed to have originated from the province of South China (Ali, 1981:10). This group did not cross the

Pacific as the first did. They were found only in the Malay Peninsula, although some had moved farther south to Sumatra, Borneo, and the Philippines Islands. They are often described as the proto-Malays.

Before they became sedentary, they practiced shifting agriculture, cultivating maize and hill padi (dry rice). As their number grew, and Hindu and Islamic cultural values strongly influenced their livelihood, their societies developed into a virtually prominent form. The kingdoms of Langkasuka established in Kedah, and that of Majapahit in Java were manifestations of self-sovereignty. The influence of Islam began during the rise of the Malacca Sultanate, and Malays accepted Islam as part of their cultural heritage (Ali, 1981).

The settlement patterns of those early peasants were in the form of hamlets surrounding the leader founder of the area (Wilson, 1967). Horrii (1981) implies that a hamlet or village was often named after the leader, any famous trees, or outstanding landmarks nearby. Areas close to streams and rivers were among the favorite spots for settlement (Haji Omar, 1978). Swift (1965), Wilson (1967), Bailey (1975, 1983) and Horrii (1981) agree that Malay peasant communities were built through strong kinship ties among the majority of their members.

Various elements of a social system such as norms, values, beliefs, sentiment, role-status, boundary maintenance or territoriality, rights and authority, ends and objectives, and the control system of stress-strain and reward-sanction (Loomis, 1962; Bertrand, 1972) prevail and are reverently observed by members. However, deviants are always appropriately sanctioned through a consensus of local leaders. Besides

these elements, the community is also maintained through the presence of a well-preserved cultural and personality system (Parsons, 1951), and various social processes (Bertrand, 1972) engaged in by the community.

Each community member is required to behave in accordance to societal norms and values. The elderly must be respected (Haji Omar, 1973); leaders are required to actively and efficiently perform functions demanded by specific status position (Ali, 1975); and rights and authority accorded by the district, state, and national leaders are respected and unquestionably accepted by members (Muzafar, 1979). These are part of the binding agents for a strong community.

Naturally, each community always attempts to fulfill the members' goals and wants through the achievement of community objectives. These goals and wants are often attained by the implementation of various community activities such as planning and organizing marriage feasts for members' children, relocating members' houses, building "balai rakyat" or the public hall, constructing roads and bridges, and involvement in other mutual assistance or "gotong-royong" activities within the villages (Haji Omar, 1973; Bailey, 1983; Haji Abdul Rahman, 1984). Needless to say, the activities within the members' own village receive the highest priority (Ali, 1981).

Despite the Malay peasants strong resentment against precise calculations over economic matters (Swift, 1965), Fisk (1964) maintains that the Malays, particularly peasant producers, have a special and strong attachment to the land. It is not only viewed from the economic utility, but its ownership is highly internalized. The obvious

annihilation suffered from the persistence of rural poverty (Shari and Sundaram, 1982; Scott, 1983; Ali, 1979) has made children a valuable asset, and land is the second most highly desired measurement of material wealth. However, Kratoska (1965) argues that when financial difficulty encroaches on the peasants, they are always prepared to sell off their land to get cash to pay for whatever bills are due. The leasing of land to middlemen or richer villagers for various ceremonial activities, such as a child's wedding, is also common among peasants (Kratoska, 1985).

Sociological and ethnographical studies of Malay peasant producers by Firth (1943), Firth (1946), Fisk (1964), Swift (1965), and Wilson (1967) have pointed to the fact that particularly among village community members, the "give and take" or "tolak-ansur" spirit is highly appreciated and expected. Such spirit receives high social appreciation and value in various peasant communities such as the rice cultivators, rubber smallholders, and fishermen in West Malaysia (Bailey, 1983). Those who fail to observe and display such an attitude are considered undesirable elements within the village community (Scott, 1983). Their presence may cause friction and conflicts with other community members.

Peasant sentiment toward community unity and solidarity can be observed when members of the same village meet in outside cities, towns or even at marriage feasts outside their villages. Their meeting in these places provide special feelings of happiness and security, since knowing others from the same locality are present, potential hardship or problems related to loneliness and the like, can be avoided. This is

important because wherever they go, the "we" feeling is always with them (Ali, 1975).

Since peasants believe that they have a common ancestry (Ali, 1981) and the "we" feeling is always in their minds, community activities such as settling disputes or aiding neighbors to look for lost animals are equally shouldered. As in most economic activities, mutual help is always extended (Swift, 1965; Haji Omar, 1973; Kuchiba et al., 1979; Haji Abdul Rahman, 1984).

Among the rice peasants, simultaneous exchange of labor, which is popularly known as "berderau" is always observed, particularly during the peak periods of transplanting and harvesting of rice (Haji Omar, 1978; Kuchiba et al., 1979; Bailey, 1983). Hence, influenced by the above spirit, and on the basis of close kinship ties, many activities are carried out by members of the same village community (Ali, 1981). Wan Hashim (1984) states that such an atmosphere is possible because family, nuclear or extended, is the main production unit, and solidarity among community members is based upon strong kinship ties.

On the other hand, mutual relationships with the neighboring villages where kinship ties exist is also observed (Wilson, 1967). This reinforces greater understanding and reciprocal relationships between village communities.

Afifuddin Haji Omar (1973) provides an illustrious account of the peasants socialization process, and their evolving socio-economic value system, in relation to agricultural modernization strategy in the Muda area. The process is basically influenced by the strength and

commitment the elder peasants have in the Islamic faith (Haji Omar, 1973:9). Through such influence, children are taught to respect the elderly, inculcate the spirit of self-reliance and mutual help among community members, and observe Islamic laws pertinent to their daily life and cultivation activities.

The emergence of various local leadership roles has molded their society into a cohesive unit (Haji Omar, 1972; Ali, 1975). During initial establishment of the village, the founder/leader, and later his descendents, controlled the leadership positions. Later, an ascriptive leadership role, which received the sultan's recognition, began to fade away (Ali, 1975). For example, Syed Husin Ali (1975) observed that the position of "penghulu" or head of a "mukim" (a group of villages) had become a political appointment rather than royal choice. Subsequent appointments are made for village headman, village development committee members, and even religious functionaries.

The majority of the rice growing peasantry are tenants (Haji Omar, 1973), operating land belonging to either absentee landlords (Gibbons et al., 1981) or relatives such as parents or siblings (Haji Omar, 1973; Abdullah, 1978). Although such an arrangement is thought to preclude the peasants displacement through acquisition of farmland by the landlords (Jegatheesan, 1977), the decrease in the number of tenant farmers from 1955 to 1976 in Muda area (Gibbons et al., 1981) was observed to have taken place in concert with what was happening in other developing countries (Asian Development Bank, 1971).

Afifuddin Haji Omar (1973) and Syed Husin Ali (1975) indicate that

the influence of the Islamic religion among rice peasantry can be seen in their reference to Islamic law of inheritance when a deceased's land holdings are to be distributed to the next-of-kin. The male next-of-kin receives a double proportion, as compared to the female next-of-kin. In other aspects of rice cultivation, the payment of tithe to the needy or religious department after harvesting (Fujimoto, 1980; Horrii, 1981; Scott, 1983) is particularly observed even by the poorer peasants. Although tithe or "zakat"³ is considered reasonable and appropriate (Haji Omar, 1973; Ali, 1975; Scott, 1983), fragmentation of land holdings through Islamic inheritance law is viewed to be problematic. Their argument revolves around the failure of rice peasants to maintain an economic farm size when the fragmentation through this procedure persists (Haji Omar, 1973; Ali, 1975).

In sum, the peasants social system in West Malaysia is built on three structures, the cultural system influenced by Islamic faith, the personality system which is developed through the peasant socialization process (Haji Omar, 1973), and the structural system, which is reinforced through the existence of various status-roles and functions occupied and played by those leaders considered as ideal (Muzafar, 1979) by their followers.

The strength of kinship ties not only manifests itself in the tenure arrangement between landlords and tenants (Haji Omar, 1973; Ali, 1975; Abdullah, 1978), but is also represented in the prevailing spirit of solidarity aspired to by members of the same village or between villages (Wan Hashim, 1984). For those without kinship ties, regular

interactions within the villages or outside strengthen their social relationships (Wilson, 1967; Ali, 1975), as they use the same village road, grocery and coffee shops all the time (Swift, 1965).

Quite recently, however, politics has been added as another significant dimension within the peasants socio-economic undertakings (Haji Omar, 1978; Haji Othman, 1978; Scott, 1983; Bailey, 1983; Shukur Kassim et al., 1983, 1984a). Local politicians have a vested interest in rice land (Haji Othman, 1978), and this interest has manifested itself in competition for land ownership in the villages by this group.

On the other hand, the implementation of input subsidies to rice peasants has been criticized as having strong political overtones (Shari and Sundaram, 1982; Scott, 1983; Shukur Kassim et al., 1983, 1984). Besides seeing the move as an attempt to gain popular votes from the rural electorates, the provision of input subsidies is seen as a measure for reinforcing the patron-client relationship within the village political sphere. Thus, access to such development accelerators can be assured to members of the peasant community who have a commitment in local level politics (Shari and Sundaram, 1982; Shukur Kassim et al., 1983).

This then has become the main source of conflict among members of a given peasant community, because when a member of equal status and eligibility is deprived of the same benefits, frustration and resentment overshadow existing social bonds. Kinship ties are liable to be broken, thus effecting a deteriorating land tenure arrangement even among kin-folk. Social disintegration caused by deprivation from such development

accelerators (Shukur Kassim et al., 1983) will definitely proliferate within village communities with great political diversity. Failure to offer a commitment to an appropriate political ideology may result in the lack of access to agricultural input subsidies and related services.

The Sociology of Agriculture and Agricultural Development

Agriculture is inherently a "man-land" relationship (Perez, 1979), and in order to understand the sociology of agricultural development in West Malaysia, it is imperative to review the nature of her structure of agriculture. The structure of agriculture is itself a broad concept because it not only encompasses various networks and linkages which exist between institutions and the predominant activities, it also involves the various principal elements of the social and production processes.

Stockdale (1982) and Heffernan (1982) agree that the concept should include the characteristics of the farm household, the farm size operated, land tenure arrangement, concentration of land ownership, institutional development, such as the cooperative organizations, credit facilities, marketing arrangement, and the labor force organization. In addition, Havens (1982) suggests that state and national policy are also an integral part. Within the field of rural sociology, Newby (1983) considers this aspect a new dimension of the sociology of agriculture which should be given a prominent place in American rural sociology as it has in the European tradition.

The discussion of the structure of West Malaysian agriculture will be based on this perspective. The aspect of "man" entailed in the

elaboration of a peasant's livelihood and his social system in the preceding sub-section will be the basis for reviewing the "land" aspect of agricultural development. In addition, related processes and institutional relationships that affect the progress of agricultural development in the country, will also be presented.

To begin with, to peasant producers in West Malaysia, land is the fundamental component of the factors of agricultural production besides labor and capital. Land is scarce, and access to some areas is very costly and difficult. During the pre-colonial period, Maxwell (1844) points out that no restrictions on the selection and appropriation of forest land was observed. This was possible because land in the form of dense forests was abundant and the population was scarce. Despite being the outright property of the sultan (king), a proprietary right could be established and gained by the subjects through clearing the land, followed by continued occupation.

According to Maxwell (1884:78), there were two basic categories of land and only one of which could provide a proprietary right:

"Forest land and land which, though once cleared, has been abandoned and bears no trace of appropriation (such as fruit trees still existing) are said technically to be tanah mati or 'dead land'. He who, by clearing or cultivating, or building a house, causes that to live which was dead land (meng-hidopkan bumi), acquires a proprietary right in the land, which now becomes tanah hidop (live land) in contradistinction to tanah mati. His right to the land is absolute as long as occupation continues, or as long as the land bears signs of appropriation."

After 1897, the proprietary right to land was changed by the adoption of the Torrens System of land ownership registration, first

within the Starits Settlements (1886), and later throughout the rest of the Malay states (Abdullah, 1985:25). From this period on, land has become an important commodity, liable to be sold and purchased through proper and legal land transfer instruments (Kratoska, 1985) when the price is agreed upon.⁴

With such abundant land resources, British Colonial Rule had focused on agricultural development, in addition to its involvement in tin mining. The concentration on an export crop such as rubber, had worsened the structure of agriculture among the indigenous peasants. According to Lim (1977), the introduction of the Stevenson Scheme to prevent peasants from being involved in the lucrative rubber industry in 1922 was met with strong resentment. It began when the sultans, induced by the British administrator, invited British and Chinese agriculturists to open up vast lands for rubber plantations in 1890, at a cost of one Malayan dollar per acre (Lim, 1976). By setting a minimum acreage to be opened up at 1,000 acres, the indigenous peasants could not afford to participate in the offer.

As a result, they had to be content with the existing small rice plots where their proprietary right was gained through the new system of land registration. These plots became smaller, particularly because of the division of land to descendents. To satisfy the Malay peasants, the British had established the Department of Agriculture in 1905 to help develop the rice subsector (Lim, 1977). The Krian irrigation scheme was completed in 1906, with the objective of bringing more land under rice cultivation (Mills, 1942). By 1932, the Drainage and Irrigation

Department was established and the first project completed under this department was the Sungai Manik scheme (Lim, 1977).

Being precluded from participating in rubber cultivation and the practice of land fragmentation resulted in their failure to maintain an optimal farm size to ensure a higher income. Since the introduction of the green revolution package program in the late 1960s, a peasant would require a farm of about 2.43 hectares in order to live above the national poverty line income (Arope and Lai, 1971). Those who cannot afford to buy land, or compete for increasing rental rates, have to rely on renting from kin with large land holdings. Gibbons et al. (1981) discovered that the polarization of land ownership and operation in the Muda area is very complex and inequitable.

In 1966, the Gini index of 0.354 for farm size distribution was revealed in the Muda area (Ministry of Agriculture, 1967). In the latter planting seasons of 1972/73 and 1975/76, Gibbons et al. (1981) found reason to believe that the Gini index of 0.360 and 0.445, respectively, could continue to deteriorate the future polarization of farm size operation in the area. This could inhibit the goal of improving the standard of living of rice peasant producers. A Gini index of 0.406 for the 1972/73 annual gross income for the area (Haji Omar, 1978) is clear proof of the point made by Gibbons et al. (1981).

The tenancy situation is also unfavorable. As Selvadurai (1978) reports, 40 percent of the rice peasant producers were tenants who rented land from either absentee landlords or kin-folk. For the 1975/76 main planting season, Gibbons et al. (1981) discovered that 57.8

percent of the tenancy arrangements in the Muda area were contracted between kin-folk. Of these arrangements, 80.5 percent were based on cash rent, 15.9 percent on rent in kind (padi) and 3.7 percent on the leasehold arrangement.

From the same study (Gibbons et al., 1981), of the total 45,115 farm holdings, 27,898 holdings (61.8 percent) were between 0.005 to 2.275 hectares, 12,197 holdings (27.0 percent) were between 2.276 to 5.696 hectares, and 5,020 (11.2 percent) were equal to or greater than 5.697 hectares. This condition resulted in many peasants living under the poverty line income (Lai, 1977). Thus it is necessary for any agricultural development policy, aimed at poverty reduction, to view all the causes for the persistence of poverty among the rice peasant producers.

Shukur Kassim et al. (1983:46) list a number of reasons that cause the persistence of rural poverty among the rice peasant producers. Small farm size and tenancy are claimed to be the most fundamental causes. Other causes include rapid rural population growth, stagnant yields, labor displacement from rice production processes, inadequate attention to other crop/farm activities, lack of opportunities for off-farm employment, and rising costs of living within the agricultural sector.

Consequently, the reduction of poverty moved at a slow pace. In 1970, the incidence of poverty was at 68.3 percent and the 1975 and 1980 figures were 63.0 percent and 46.1 percent, respectively, (Malaysia, 1981). Throughout those years, the padi or rice cultivator group was

one of the largest groups within the agricultural sector to be affected by rural poverty. The Fourth Malaysia Plan (Malaysia, 1981:33) reports that of the 140,000 households, 123,400 or 88.1 percent were affected by poverty in 1970. As their number grew from 148,500 to 151,000 households from 1975 to 1980, the poverty incidence was only reduced to 77.0 percent and 55.1 percent, respectively.

Integrated Agricultural Development Projects

(IADP) as a Strategy for Agricultural Development

West Malaysia's agricultural development has been initiated through the implementation of three fundamental strategies. These are the infrastructural development, institutional and organizational development, and finally, the human resource development.

As has been mentioned in the preceding sub-section, the role played by the Department of Agriculture (DOA) and the Drainage and Irrigation Department (DID) was specifically aimed at improving the lot of the rice peasant producers in the Peninsula. The period before the 1950s saw a limited expansion in the infrastructural development. However, in 1950 the Rural Industrial Development Authority (RIDA) was established to develop the rural areas (Ness, 1967). Rural roads, basic amenities such as wells and public halls were constructed under this agency.

Unfortunately, the agency was seen overemphasizing the infrastructural development only, while the human resource development, which was an initial part of its objective, was neglected. As a result, by 1960, the agency was terminated (Ness, 1967). In its place, the Council of Trust for the Indigenous People or "Majlis Amanah Rakyat

(MARA)" was promulgated to undertake human resource development, particularly, entrepreneurial development among the indigenous population.

Ness (1967) asserts that the backlog in processing land applications by the rural population gave birth to the Federal Land Development Authority (FELDA) in 1956. The agency's main function was to assist state land offices in hastening the process of land alienation, and the coordination of state land development projects. However, during the post-independent years, FELDA's roles have been reshaped into autonomous new land development functions concurrent with the New Economic Policy (NEP) introduced during the Second Malaysia Plan of 1971-75 (Baharin and Perera, 1977).

Shortly before the Second Malaysia Plan period, the government began to specialize various agricultural development functions in terms of allocating different roles to different development agencies. In this respect, the overall infrastructural development has been given to the Public Works Department (PWD), with the DID handling rural roads within the irrigation projects.

By focusing on different roles by different agencies, it was thought that the duplication of functions could be avoided. Unfortunately, the reverse has happened (Salih, 1978; Clad, 1983). Kamal Salih (1978) provides an explicit picture of the situation that is persisting within these agencies. A description of the agencies and their functions provides evidence for the author's case.

Among the earliest institutional organizations established by the

government were DOA in 1905, the Rubber Research Institute (RRI) in 1925, and the DID in 1932. The DOA and DID are concerned with rice and other annual crops, while RRI is responsible for the development of the rubber industry. But sometimes, DOA and RRI become involved with the same group of farmers who have both rice and rubber smallholdings. As a result, intrusion into one another's areas of concern is impossible to stop. The same situation persists between the Federal Agricultural Marketing Agency or FAMA and the Farmers' Organization Authority (FOA). FAMA was established in 1965 to cater to the marketing of the farmers' produce. FOA on the other hand was established in 1973 and is responsible for coordinating the farmers cooperative organization and association. The situation is now becoming a little haphazard because both agencies are now marketing farmers' produce simultaneously.

For land development functions, FELCRA or the Federal Land Consolidation and Rehabilitation Authority was established in 1966 to coordinate state fringe land development projects. The agency was established because the federal government would not tolerate failures by various state land development agencies in managing their existing fringe alienation schemes. But now FELCRA is carrying out new land development with an almost similar approach as FELDA. Only one main difference can be seen in FELCRA's focus on the rice crop, for this particular crop, FELDA does not conduct any experiments.

Other agencies which may also duplicate functions include the Agricultural Bank or Bank Pertanian (BP), which was established in 1969 to cater to the farmers credit needs. It is understood that FOA also

performs the same function. Regional agricultural development agencies such as the Muda Agricultural Development Authority (MADA), Kemubu Agricultural Development Authority (KADA), and Besut Agricultural Development Authority (BADA) were established during the early 1970s. MADA in Kedah, KADA in Kelantan, and BADA in Trengganu are all responsible for the development of the rice crop in their respective regions. Certain functions such as the organization of the farmers associations and credit services are also provided.

In 1972, another marketing agency was promulgated to cater to the marketing, milling and drying of rice. This agency, the National Padi and Rice Board or Lembaga Padi dan Beras Negara (LPN), provides a regional office complex for handling the above functions. However, during peak harvesting periods, in particular, during a bumper season, the agency could not handle its task efficiently. The transportation arrangement is still an area which needs improvement.

The Rubber Institute Smallholders Development Authority (RISDA) and the National Tobacco Authority or Lembaga Tembakau Negara (LTN) were established in 1973. While RISDA concentrates on the well-being of rubber smallholders, with respect to their replanting activities, LTN focuses on tobacco development. LTN can be seen as a specialized agency, but for RISDA, the involvement in mini-estate and new-planting activities for rubber is very similar to what is being done by FELDA. An added dimension in this agency is its venture into aquaculture, a field which is supposed to be handled by the Fisheries Department or MAJUIKAN, established in 1971.

Apparently, while all these agencies are also involved in some kind of research within their frameworks, the overall agricultural research activities are handled by the Malaysian Agricultural Research and Development Institute (MARDI) which was established in 1969. Working in close contact with the Agricultural Institute of the DOA, and the Agricultural University or Universiti Pertanian Malaysia (UPM), the agency also plays a significant role in human resource development. UPM was established in 1971 to offer a three-year professional course in agriculture, agriculture education and animal science, and degree courses in agriculture, agribusiness, resource economics, and the like.

Agricultural extension has been the main concern of UPM. It is now working very closely with the DOA and MARDI in planning strategies for the improvement of the existing extension program in the country (Yassin et al., 1984). Producing a sufficient number of agricultural professionals to meet the demand of the new Training and Visit System of agricultural extension is another main goal of UPM. As it is now, there are too many farmers for the few number of agricultural technicians. Judd (1984) asserts that for the Training and Visit system of extension, a ratio of one agricultural technician or Village Extension Worker to about 250 farmers is desirable in a sparsely populated area. However, one VEW to about 1,600 farmers is still workable in a densely populated area.

Moore (1984) argues however, that an optimal ratio of VEW to farmers may not assure the success of the T and V system, particularly when the contact farmer selected, fails to play the role of a reference

farmer. Often times, the selection of contact farmers is not based on the popularity of the individual, but is based on his wealth, political involvement, and personal relationship with the agricultural officers in the area (Moore, 1984). When this is the case, Moore (1984) maintains that only the contact farmer will gain the benefits of the new extension system. There is always a tendency for him to hold his own personal interests above those of the other farmers.

It is within the framework of infrastructural, institutional and organizational, and human resource development that an integrated approach to agricultural development was called for. The Integrated Agricultural Development Project or IADP, as a strategy for agricultural development was initiated when the area development concept was selected by the then Prime Minister, Tun Abdul Razak, as one of the few national projects identified to play a role in the implementation of the New Economic Policy or NEP (Jamil, 1972:19). The NEP has two fundamental objectives. The first is the eradication of poverty for all races, and the second is the restructuring of the Malaysian society so that the various races are not identified solely on their economic functions (Malaysia, 1971b).

Two lines of attack are identified within the IADP strategy. These lines hope to reduce poverty among the farm households through improved farm productivity, income, and standard of living. The first line of attack was a concentrated and integrated program to meet the needs by more rapid development in areas that were ready for take-off (Shukur Kassim et al., 1983). The second approach was continuing work in other

less developed areas aimed toward preparing them for accelerated agricultural development.

Four basic features of the first line of attack were delineated by Mohamad Jamil (1972), and are considered the most important features which form the basis of the IADP strategy (Shukur Kassim et al., 1983). They include:

- 1) The establishment of the principle of area development. This was justified on the grounds that focusing on select area would produce results in the quickest possible time, especially since the country's resources of trained manpower were scarce and could not afford dilution in an unfocused approach.
- 2) The recognition that social factors were equally important to development as economic ones. In particular, it was stressed that the drive to increase productivity and get agriculture moving would fail "unless our farmers are totally involved both as individuals and as members of dynamic farm organizations."
- 3) The stress on the important role of the government which had to take "all feasible and appropriate measures to eliminate or correct all weaknesses, to strengthen human resources and to institute those measures necessary to carry out the job of agricultural development."
- 4) The identification of specific constituents in area development including physical infrastructure, extension, credit, marketing, and mechanization.

As the IADP is the progeny developed out of the Area Development concept, and the concept itself is part of the NEP, the two objectives of the NEP are planned to be achieved through:

- 1) Encouraging the modernizing of the rural sector through the increasing use of science and technology, livestock development, and modern techniques of farming and fishing.
- 2) An extended program of agricultural extension, credit and improved marketing arrangements through farmers associations, supported by Bank Pertanian and FAMA.
- 3) Modernization of rural life through direct and indirect

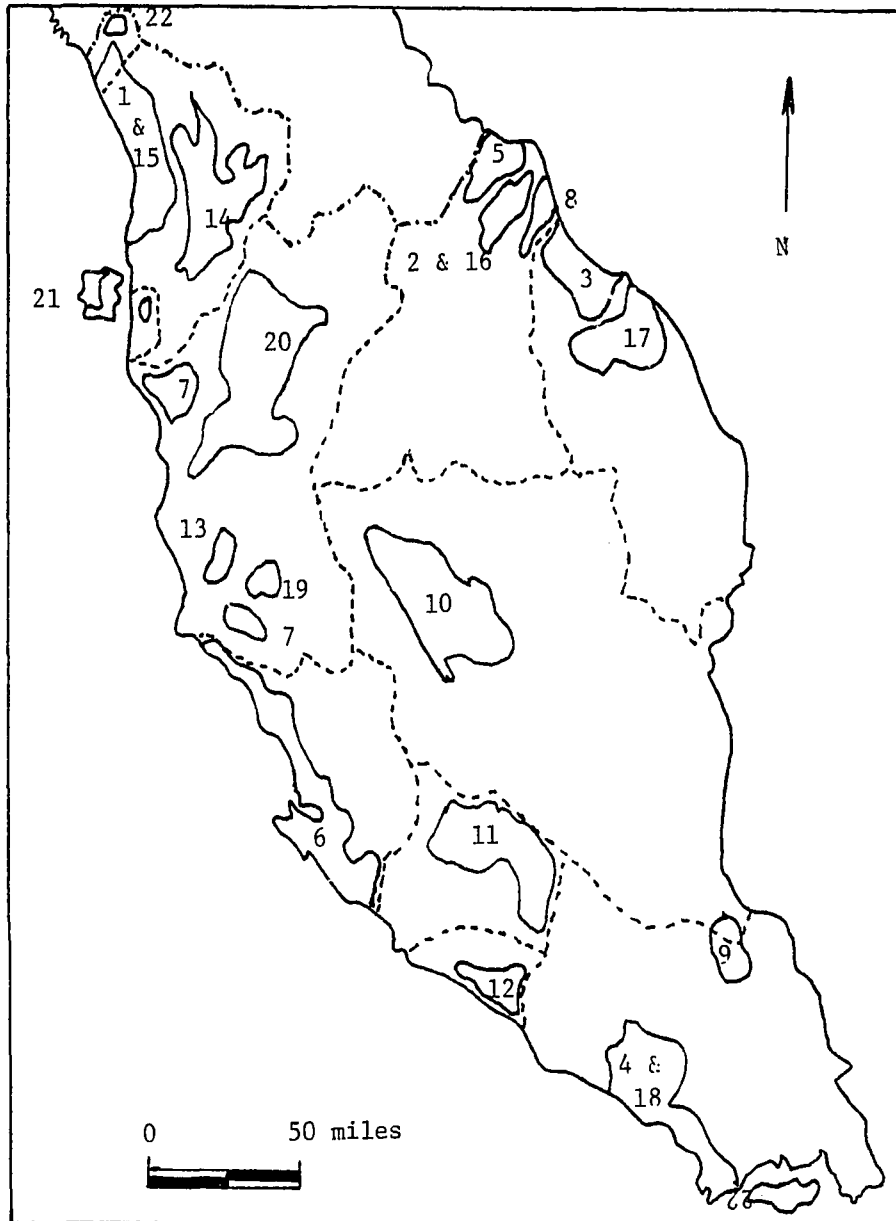
participation of the farming community in the establishment and running of the industries and commercial enterprises, and the expansion of urban services in the rural areas.

- 4) Direct involvement of farmers in credit, marketing and supplied activities as a means of promoting commercial sense among the farmers.
- 5) Training through action programs of farmer leaders in the skills of making profitable business decisions; as well as the training of Malays and other indigenous people for managerial functions.

The DOA is seen as the main institution responsible for ensuring the realization of the above objectives. That does not mean that every activity must be handled by the DOA. The delegation of authority to other agencies and the coordination of project implementation are considered the best approach.

The locations of the IADPs in West Malaysia are presented on Map 2. They are located primarily along the western region of the Peninsula. These IADPs are not implemented simultaneously because of the gradual infrastructural development inherent in the availability of funds during various development periods. Another reason is the necessity for setting priority for various local area development according to the immediate needs of the selected areas.

Table 1 provides various IADP areas as shown on Map 2. The number beside each IADP matches the location, as it is on Map 2. As shown in the Table, the delineation of all IADPs intends to present the actual IADP area at the commencement of the project, the actual area covered at the completion of the project, the total population and households involved, the average household size in the area, the proportion of poverty incidence, and for some major rice growing IADPs, average yields



Map 2. West Malaysia: locations of IADP areas as of 1982
(Source: Shukur Kassim and Aziz Fahar (1984))

Table 1. IADPs in West Malaysia as of the end of 1882 (Source: Derived from Shukur Kassim et al., (1984), p. 2)

No:	IADPs	Actual initial area in hectares	Completed area in hectares	Total popula- tion in 1980	Total house- holds in 1980	Average house- hold size	1981 ave. rice yield (tons/ha.)	Percentage of poverty incidence as of 1976
1	MADA I (include MADA II)	105,828	98,000	539,171	106,609	5.06	3.85	78.68
2	KADA I	34,805	33,600	160,764	32,755	3.58	3.58	85.33
3	Besut	14,170	10,121	49,009	9,990	4.91	3.50	79.26
4	Johor Barat I	78,915	100,364	249,096	43,976	5.66	NA	70.77
5	Projek Kelantan Utara	182,922	182,922	373,220	75,534	4.94	3.25	79.90
6	Barat Laut Selangor	72,750	72,750	218,784	38,768	5.64	3.35	79.29
7	Krian-Sungai Manik	30,600	30,600	180,139	33,299	5.41	2.30	89.72
8	Kemasin-Semerak	10,370	14,450	91,594	18,870	4.85	NA	84.97
9	Rompin-Endau	2,830	11,400	18,755	3,739	5.02	NA	78.30
10	Pahang Barat	191,500	204,000	201,494	42,148	4.78	NA	72.06
11	Negri Sembilan Timur	179,367	179,367	270,306	53,975	5.01	NA	63.93
12	Malacca	92,500	92,500	361,250	67,036	5.39	NA	66.78
13	Trans-Perak	3,200	18,500	15,177	3,185	4.77	NA	88.07

14 Kedah Valley	225,000	225,000	651,278	130,539	4.99	NA	83.73
15 MADA II (included in 1)							
16 KADA II	54,569	52,640	268,986	54,242	4.95	3.50	85.41
17 Ketara	48,266	48,266	143,757	29,548	4.86	NA	77.62
18 Johor Barat II	106,646	131,293	307,907	54,114	5.69	NA	79.90
19 Tumboh Block	19,172	28,607	81,925	16,551	4.95	NA	80.67
20 Perak Utara	233,681	354,858	106,370	22,095	4.81	NA	82.44
21 Balik Pulau-S/Prai	64,872	64,872	290,856	53,429	5.48	NA	81.27
22 Perlis Utara	17,925	26,589	59,566	14,134	4.22	NA	67.21

are also indicated.

IADPs one through four were implemented before 1975, and are considered completed projects. Numbers five through seven were implemented between 1975 and 1980; numbers eight through fifteen were initiated in 1980, but are still undergoing various execution stages; and those from number sixteen and above were initiated in 1980, but, have not yet begun. It is projected that about Malaysian \$3.8 billion are needed to fund the projects.

The role played by the DOA revolves more or less around the coordination of the various development agencies involved in the implementation of the project activities (Ministry of Agriculture, 1982). However, in areas where regional agricultural development agencies such as MADA and KADA are established, most of the coordination activities are handled by these agencies. The role of the DOA will be to sit on the Steering Committee responsible for ensuring that the project is running smoothly.

Coordinating various agricultural and non-agricultural development agencies within these IADPs is not a simple task, particularly when some functions are carried out by more than one of the agencies involved. For example, the handling of the crop protection activities during major pest and disease outbreaks within MADA and KADA areas would require a well planned and organized effort by both agencies. Any unwanted misunderstandings may cause terrible delays in remedying the existing problem.

Likewise, in areas with close proximity in MADA and KADA, the

functions carried out by FOA outside these two areas may not be as effective as those carried out within the areas. Better organization and coordination of activities is possible because of a well established system that matches well with a captive clientele. Hence, efforts to streamline all cultivation and production processes requires careful planning and organization of personnel. The situation will become worse when not all of the farmers in the area are members of the organization, like the FOA.

The National Agricultural Policy

In the past, agricultural development policy has been integrated within the national socio-economic development plans. During the implementation of the Fourth Malaysia Plan (1981-85), the government, through the Ministry of Agriculture, realized that the performance of the agricultural sector had not been very encouraging (Malaysia, 1984). There was, needless to say, a necessity to reformulate the existing agricultural policy to boost productivity, hence income among the agricultural households.

An attempt made to formulate a comprehensive National Agricultural Policy (NAP) in 1983 was shattered when the Minister in charge claimed that the policy contents were only equivalent to a progress report (Clad, 1983). A policy revision was then undertaken, and on March 1984, the NAP was officially announced and presented by the Deputy Prime Minister (Mukherjee, 1984). The announcement was met with mixed reviews. Among them were those who have critically argued that the policy would not resolve the existing incidence of poverty, as was

planned in the Fourth Malaysia Plan document (Gibbons, 1984; Abdul Karim, 1985). This criticism is spelled out because the problems as solutions related to the improvement of the basic structure of agriculture have not been adequately presented in the NAP.

Although the success of the NAP is thought to be highly dependent on human resource development (Sajilan, 1985), sufficient manpower, with an inequitable distribution of factors of production among peasant producers may not guarantee a fair access to the fruits of the NAP as they are being translated into improved yields, income and standard of living.

The main objective of the NAP is "to maximize income from agriculture through efficient utilization of the country's resources and the revitalization of the sector's contribution to the overall economic development of the country" (Ministry of Agriculture, 1984). Income maximization refers to the maximization of both the farm and the national income in line with the concept of development with growth to be attained through the efficient utilization of resources (Malaysia, 1984:244).

To reach this desired income level, it is hoped that a judicious selection of economically remunerative crops is made to provide the necessary growth in the agricultural sector, which would consequently contribute to the equitable distribution of the development benefits (Ministry of Agriculture, 1984:4). In what ways this could be successfully attained is not clear, because a detailed outline of the necessary policy tools and instruments is not delineated in the

thirteen page document which contains the whole NAP statement.

If this document is meant for the public at large, it may be justified not to include some theoretical underpinnings, economics, sociological and political development. However, by providing a theoretical background, the document would have served the public better. An understanding of the failure or shortfall of past policies from these theoretical perspectives may enlighten the public's appreciation of what the government has done, and continues to do in the field of agricultural development in the country.

It seems that the NAP is virtually formulated with the guidelines of the neo-classical⁵ theory perspective. The government's continued effort to provide the basic amenities, infrastructure, credits, marketing channels and improving the managerial skill of farmers is basically influenced by an adherence to such a perspective.

Other theoretical perspectives, such as the radical school (Alavi, 1975; Lenin, 1977; Patnaik, 1979), which emphasizes the redistribution of factors of production for agricultural development, is of course not in concert with the government philosophy. An inclination toward the reformist school of development planning however, would offer a rather comprehensive agricultural development program for the country. In this perspective, significant reliance on empirical analyses of the problems of Malaysian agriculture is suggested (Gibbons, 1984).

These empirical analyses will surely provide sound cause and effect relationships of the various independent variables presumed to be influencing whatever dependent variables that are relevant to

agricultural development. As an example, by empirical analysis, proof can be obtained that salient factors that cause rural poverty can be precisely detailed. In turn, plans to solve this problem could be appropriately formulated.

In reviewing the thirteen page NAP document, the influence of the neoclassical school is clearly apparent. In the selection of strategies for agricultural development - new land development, "in-situ" development, the provision of agriculture-support services, and the social and institutional development - are planned to be accomplished on the basis of the neoclassical approach. As a result, the root cause of some agriculturally related problems cannot be identified. Even if they were identified, the solution should also be approached from an empirical angle, because the evidence that empirical analysis provides points directly to better alternatives for solving the basic problems.

In the new land development strategy, the development of new agricultural settlements will be shouldered by FELDA and FELCRA. As it is now, the settlers selection procedure has not been very equitable for some potential applicants. The element of patron-client relationship between the applicants and the selection committee is difficult to avoid. In addition to the aspect of land distribution, fragmentation of some big plantations, and allocation to each landless peasant with an optimal farm size at minimal cost (Siwar, 1976) from these fragmented plantations, is not included as a strategy in the NAP. However, there is a plan for the consolidation and commercialization of agricultural holdings, turning it into a corporate farm.

As it is, various large strips of abandoned land have been turned into corporate farms either managed by farmers cooperatives or private investors (Utusan Malaysia, 1985). Rice or "padi" estates began to proliferate even in areas where the cultivation practices are currently running very smoothly. It is very important to bear in mind that such a commercial strategy might backfire and result in irreconcilable problems. While rice peasants thought that by joining a corporate farm organization might offer them a better income and provide some free time, the profit accrued to the organizers might be tripled. Thus, the creation of a capitalist farm will result in a further exploitation of the peasantry.

Summary and Conclusion

West Malaysia's agriculture is comprised of two predominant sub-sectors, the estate or plantation sub-sector, which concentrates on export crops such as rubber, oil palm, and cocoa, and the smallholders sub-sector, which is involved in both export as well as domestic crops (Selvadurai, 1978). Because of the rather slow industrialization pace currently experienced by the country, and the potential agriculture has for future expansion and improvement, agriculture's role as a fundamental contributor to overall economic growth and development is undeniable.

Unfortunately, the agricultural sector has been affected by poverty more than any other sector. Reduction in poverty has been quite slow, particularly among the rice cultivation households (Malaysia, 1981). The persistent inequality in farm size distribution (Gibbons et al.,

1981), farm income (Haji Omar, 1978), and discriminating access to various accelerators for agricultural development (Shari and Sundaram, 1982) make any attempt to improve their lot futile, particularly when questions related to the problems of the structure of agriculture are not properly addressed and resolved.

Agricultural development must not only aim at remedying problems related to the basic structure of agriculture, a neutral approach free from political interference should be taken in distributing various aids to farm households. Through such an approach, existing social bonds and relationships among farmers can be maintained, and social institutions such as "gotong-royong," "berderau," "tolak-ansur," and mutual sharing of various public facilities for community development are properly utilized.

A neoclassical strategy such as that of the IADP for agricultural development is inherent in the country's long history of association with capitalist development. However, government intervention in a number of vital of economic enterprises precludes a total capitalist dominance in the agricultural sector. It is timely enough for the policy makers to exhaust all schools of development theory in formulating a comprehensive National Agricultural Policy for the country.

With the declaration and presentation of the NAP to the public, many have thought that the problems inherent in the persistence of rural poverty cannot be solved effectively (Gibbons, 1984; Abdul Karim, 1985). Rather than incorporating new and more appropriate ideas, such as the

redistribution of plantations among the landless peasants at minimal costs (Siwar, 1976), developing an effective monitoring system for farm size polarization by few operators and/or landowners, and revising the approach in settlers selection procedures, the NAP is seen as just reassuring and strengthening what has already been presented in the previous development policies.

A new dimension is the consolidation of small and fragmented farms into large rice estates or corporate farms. The idea is undeniably feasible and appropriate. However, if such a strategy would benefit only few investors, at the expense of small rice farm operators, then the method would fail to improve the peasants' income and standard of living. Other avenues which can really benefit the peasants in the most strict sense have to be examined, and a careful plan for implementing the new strategy will have to be formulated.

Footnotes

- 1) According to the mid-term review of the Fourth Malaysia Plan period for 1981-85 (Malaysia, 1984), the contribution of the agriculture sector to GDP was 22.4 percent in 1983 compared with 23.8 percent in 1980. For the overall national employment, this sector accounted for 37.0 percent in 1983 compared with 39.7 percent in 1980. In terms of Foreign Exchange earnings, agricultural exports account for 32.4 percent of the total export in 1983 compared with 39.8 percent in 1980. This declining performance of the sector has perhaps triggered the government to reformulate a National Agricultural Policy (NAP) for the country.

- 2) When the Japanese surrendered in 1945, the British reoccupied the then Peninsula Malaya. The British tried to introduce a constitutional change by establishing a Malayan Union. Such a drastic change in the overall administration of the country would strip all power and authority held by the sultans in the eleven states of the Peninsula. Malays from various ranks and organizations such as Kesatuan Melayu Muda (KMM) or Young Malays Association, Malay Nationalist Party (MNP), Angkatan Pemuda Insaf (API), a Youth section of MNP, consolidated their efforts to fight against the British attempt at turning the country into a republic. The British had to withdraw the idea because of the intensity of antagonistic response to it, particularly during the middle of 1946, after the formation of the United Malays National Organization (UMNO) (Ali, 1981).

- 3) There are two types of zakat in the Islamic Syari'at or law. Zakatul-Fitr or personal zakat is normally paid by those who have the ability to provide sufficient needs for their families to those who do not during the month of Ramadhan (ninth month of the Lunar calendar). This acts to purify their fasting during the month. The other zakat is paid on the extra assets a Muslim has, and which he or she has been saving (not using) for at least a year. For gold not worn as jewelry and money, the proportion to be paid is 2.5 percent. For livestock such as goats, cattle, camel and sheep, the proportion varies according to the age and number of stock one has. For cereals such as rice, wheat, barley, sorghum and the like, 5 percent of the total harvest will be paid as zakat to the needy or religious department if the water used to cultivate the crop is supplied through an irrigation system. If the water used is rain water, the proportion to the total harvest to be paid as zakat is 10 percent. The harvest has to be a net harvest, that is the rental cost has to be deducted from it.

- 4) Through this kind of land sale, much Malay land had fallen into the non-Malay middlemen. This had aggravated the already deteriorating land ownership patterns among the Malay peasantry. According to

Abdullah (1985), the British Colonial Rule had introduced the Malay Re-Reservation Land Act in 1913 to prevent the sale of Malay land to the non-Malays.

- 5) The neo-classical theory perspective in economic development espouses a capitalistic approach in sectorial development. Within the agricultural sector, the commercialization strategy as a policy tool of agricultural development is implemented within the "laissez-faire" focus at the prevailing structure of agriculture. Issues such as the polarization of land ownership and the inequitable distribution of farm size operation are left as it is. The incidence of poverty within the sector is solved by introducing new technologies such as chemical inputs, drainage and irrigation, system, high yield variety seeds, and a better farm management skill. No reorganization of the land ownership patterns is done.

CHAPTER 3. LITERATURE REVIEW

"Kinship is the legitimate vehicle through which membership in a rural community is galvanized into economic, social, and political action.... The presence of 'close relatives' is regarded as an important proxy for prevalence of social ties, which, in turn, represents integration into the community, then the lack of integration into one's social environment appears to facilitate further estrangement consequent of undertaking physical dissociation through migration."

(Abeysekera, 1984:148)

The above remarks were made in regard to the rice peasant producers of Sri Lanka. It seems to be analogous to the conditions and situations which the rice peasant producers of West Malaysia find themselves. Despite the lack of specific studies to verify the relationship between levels of social integration and migration in the country, and this study seems to be the first, the hunch would suggest that the direction of the relationship would follow that of the Sri Lanka case - social integration effecting the decision to migrate among rice peasant producers.

This chapter will review various migration and ethno-social-anthropological studies to elicit factors which affect social integration and also act as the determinants of migration in West Malaysia and other developing, and developed settings.

Conceptualization of Migration

In traditional Malay society, "merantau," which denotes migration, is considered part of a socialization process (Provencher, 1976). Malay males are expected to leave their villages of origin, though not

permanently, but in terms of circulation (Nagata, 1974), to gain a diversity of experiences related to their personal development (Provencher, 1976). Their return to the former villages after a short absence are fully laden with interesting and fantastic tales about the place or places they have been. These tales serve as a motivational force for others to visit those places.

As the rural population begins to grow, and rural employment is often limited (Baharuddin, 1979; Halim, 1981; Bailey, 1983), seasonal migration, particularly from the states of Kelantan and Trengganu to the rice bowl area of Muda in Kedah, becomes an intermittent annual activity among members of peasant communities. This seasonal migration is strictly a rural-rural direction. Labor shortages during the peak period of rice harvesting sometimes do not bring migrant workers from within the Malaysian Peninsula alone, but have also become a source of job for the immigrant workers from Southern Thailand to earn extra income (Haji Omar, 1978; Kuchiba et al., 1979; Bailey, 1983).

The decade of 1970s portrayed a period of massive rural exodus both to the urban centers and townships, and to rural resettlement sites (Nagata, 1974; McGee, 1975; Narayanan, 1975; Kaplan et al., 1977; Baharin and Perera, 1977; Young, 1978; Hashim, 1979; Pryor, 1979; Selvaratnam and Dissanayake, 1979; Sulaiman, 1981; Johnstone, 1983).

Aminuddin Sulaiman (1981) presents an interesting interpretation of the internal migration typology in West Malaysia. The presentation reflects the strong influence the dualistic economic expansion has on the livelihood of the Malaysian peasantry (McGee, 1975; Young, 1978). A

subsequent capitalist penetration into the Malayan economy (Ali, 1979; Baharuddin, 1979; Halim, 1980; Lim and Canak, 1981) has resulted in uneven development between the urban-modern and rural-traditional sectors (Lomnitz, 1976; Portes, 1978).

Figure 1 illustrates the three possible trends of population mobility experienced in West Malaysia. They include the rural-urban/urban-rural, inter-rural, and inter-urban migration flows (Sulaiman, 1981). Within each urban and rural sectors, Sulaiman (1981) asserts that there is a similarity in employment activities which revolve around petty trading and bazaar-type business undertakings in both the traditional-urban and the modern-rural subsectors. However, within the modern-urban subsector, employment activities involve a high level of industrial and service-oriented socio-economic business relationships. The only unique situation is found within the traditional-rural subsector, where the predominance of peasant agricultural activities continue to persist.

Despite all these types of migration flows, Young (1978) maintains that most of the migration activities in West Malaysia involve rural-rural migration. Pryor (1979) supports this claim, finding that over 66 percent of in-migrants destinations are other rural areas.

According to Chander (1977:314-329), the total number of migrants moving in various internal migration flows, in West Malaysia in 1970, totalled over 2.41 million people. This figure is higher than that calculated by Pryor (1979) despite the fact that both figures were derived from the same intercensal period of 1960-70. Pryor (1979:83)

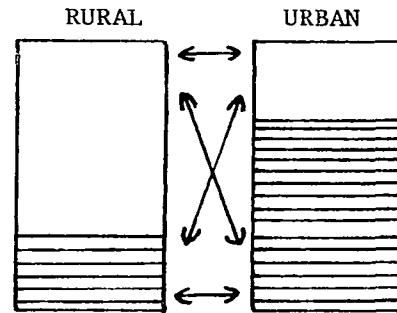


Fig. 1a. Rural-Urban/Urban
Rural Migration

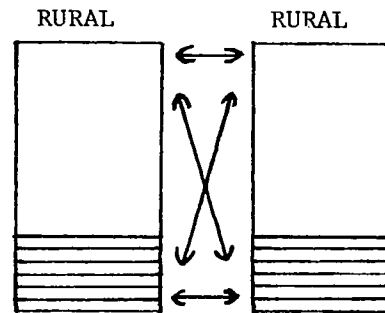


Fig. 1b. Inter-Rural
Migration

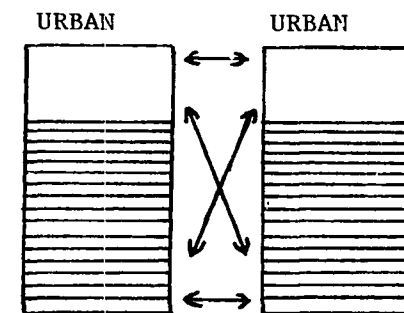


Fig. 1c. Inter-Urban
Migration

Sectoral System

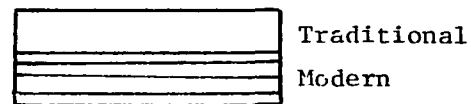


Figure 1. Migration between and within regions (Rural-Urban) and sectors (Traditional-Modern) (Source: Aminuddin Sulaiman, 1981:14)

gives a total number of 953,680 migrants involved in all the flows. The difference may be due to the calculation procedure employed by the two authors. The use of the 'de jure' or 'de facto' method in determining migrant estimates can result in dissimilar totals.

Putting this difference aside, Chander's (1977) inter-regional migration figures look very interesting. Of the total 2,412,900 migrants 949,200 (39.3%) were the rural-rural migrants, 368,100 (15.3%) were the rural-urban migrants, 799,700 (33.1%) were the urban-urban migrants, and 295,900 (12.3%) were the urban-rural migrants.

From the subsectoral perspective, Young (1978), using the same data source, reports that in the rural-urban flow, 58.1 percent of the migrants were from the modern-rural subsector, while the remaining 41.9 percent were unaccounted for. For the urban-rural flow, 41.3 percent of the movers originated from the traditional-urban subsector, while another 31.9 percent were from the modern-urban subsector. The remaining 26.8 percent were unaccounted for. The subsectoral figures for the rural-rural migration flow has not been determined.

FELDA had resettled about 100,500 people (Baharin and Perera, 1977:62), and FELCRA had about 37,700 people resettled by the end of 1970. Taking the rural-rural migrant figure reported by Chander (1977) and then subtracting the total number of people resettled by FELDA and FELCRA from it, the remaining 811,100 people will be those who have been involved in a spontaneous rural-rural migration flow between 1960 and 1970.

Spontaneous rural-rural migration usually involves a household unit

or a small group of households moving to newly purchased or acquired farmland through formal application to the state government (Fisk 1964). Evidently, spontaneous rural-rural migration flows that involve large groups of migrants have been taking place in West Malaysia (Ali, 1975; Haji Bakar et al., 1979, 1980). Except for those who colonized farmland in the Panchor area of the state of Perak (Fisk, 1964), those who colonized government land in the Teluk Gong and Binjai Patah areas of the state of Selangor (Ali, 1975:158), Trans-Perak or Seberang Perak in the state of Perak (Haji Bakar et al., 1979, 1980), and many other unreported cases (Berita Harian, 1985) in the country, are considered rural squatters.

From the preceding discussions, the conceptual understanding of migration in West Malaysia evolves from the socialization process to the massive voluntary movement between regions in search of new places of residence, in line with the felt needs for survival. However, forced migration to resettle the Chinese population who lived in remote villages into fenced settlements to protect communist resurgents' contact with them during the initial emergency period (1948-1960), had also been implemented by the government (Lim, 1983). During the 1970s, such a practice had been arrested, and later, this type of forced migration had been substituted with organized and fully sponsored rural resettlement projects through the auspices of FELDA and FELCRA (Ness, 1967).

Definition of Migration

Migration is commonly viewed as the movement of an individual or groups of individuals from one residential location to another (Speare, 1974; Bach and Smith, 1977; Rossi, 1980; Hoffmann-Nowotny, 1981). From the behavioral perspective, migration is preceded by a decision-making process on the part of the migrants (Shaw, 1975; Harbison, 1981; De Jong and Fawcett, 1981; Goldscheider, 1984).

The above notion of the definition of migration emanates from the Mangalam's (1968) philosophy of population study. The present study builds an understanding of the migration process as "a relatively permanent moving away of a collectivity, called migrants, from one geographical location to another, preceded by decision-making on the part of the migrants, on the basis of a hierarchically ordered set of values or valued ends, and resulting in the interactional system of the migrant" (Mangalam, 1968:8).

Spontaneous rural-rural migration refers to the actual moving away of rice peasant producers from village communities in the Yan district, Muda area in Kedah, to the Trans-Perak or Seberang Perak IADP area in the state of Perak. The study focuses on the actual movers, because sampling potential migrants will inhibit the further understanding of the actual problems and changes that have been taking place in the migrants' lives. Likewise, by including non-movers as part of the sample, a comparative-contrast socio-economic analysis can be presented for the two groups of rice peasant producers.

Social Integration

Social integration is a broad, abstract concept which refers to the existence of a persistently strong tie that crystallizes the sense of attachment to one's community (Cooley, 1902; Rossi, 1972; Abeysekera, 1984). This sentiment signifies an emotional feeling of satisfaction with one's social environment (Goldscheider, 1971, 1984; Speare, 1974; Bach and Smith, 1977; Rossi, 1980; Glasgow and Sofranko, 1980; Abeysekera, 1984).

Rossi's (1980:82) study of urban migration, stemming from the feeling of dissatisfaction with the place of residence to Oak Lane, Kensington, West Philadelphia, and Central City, provides a number of notions of social integration persisting within an area or a community. The following is a list of his conceptual interpretation of an area or community which possesses a sense of social integration:

- 1) An area or community may be considered integrated if the division of labor among its inhabitants is such that all the major needs can be filled within its borders.
- 2) An area or community may be considered integrated if there is a high degree of moral consensus among its inhabitants-agreement concerning standard behaviors, life goals, and so on.
- 3) An integrated area or community might be viewed as one in which its inhabitants perceive each other as substantially alike in important status dimensions.
- 4) An integrated area or community might be considered as one in which there is a substantially large number of personal ties among its residents.

Rossi's (1980) claim that there is a lack of a unique definition of social integration, as pointed out in the above list, is indeed a manifestation of the complexity of the concept.

The claim deserves unequivocal support because in many community studies (Fried and Gleicher, 1961; Fisk, 1964; Ali, 1975; Gibbons et al., 1980; Bailey, 1983; Wan Hashim, 1984), socialization process (Haji Omar, 1973; Kuchiba et al., 1979; Horrii, 1981), and migration (Speare, 1974; Bach and Smith, 1977; Hennigh, 1978; Goldscheider, 1971, 1984; Gallin and Gallin, 1980; Glasgow and Sofranko, 1980; Sofranko and Williams, 1980; Hoffmann-Nowotny, 1981; Choi, 1984; Abeysekera, 1984), the concepts are either explicitly defined or implicitly suggested.

In studies where the concept has been explicitly defined (Goldscheider, 1971; Rossi, 1980; Glasgow and Sofranko, 1980; Abeysekera, 1984), the definition has been very broadly specified. The various aspects that could possibly influence the state of social integration range from social, economic, cultural, demographic, and political. Where the concept has been implicitly applied, most studies revolve around the social organization, leadership role and function, and general community socio-economic development (Swift, 1965; Wilson, 1967; Ali, 1975, 1981; Gibbons et al., 1980; Scott, 1983; Bailey, 1975, 1983; Shukur Kassim et al., 1984a; Wan Hashim, 1984).

Hoffmann-Nowotny (1981) maintains that social integration is enhanced by social participation that exists in the structure of a societal system. The author continues to assert that this concept can be measured by the degree to which a system unit occupies positions on structurally relevant structures. Tapinos and Piotrow (1978), Gallin and Gallin (1980), Glasgow and Sofranko (1980), and Abeysekera (1984) are in agreement with Hoffmann-Nowotny's (1981) social participation

aspect of the definition of social integration. As members of a given community prefer direct and constant participation in communal activities, the community will be tightly bonded into ever-lasting social integration.

The association of social integration with the elements of social structure can be found in the work of Blau (1977), on the primitive theory of social structure, and the work of Ralph Linton (1936), on the study of man. Blau (1977:5) maintains that the prevalence of ingroup relations and associations within a given community integrates the various parts of the social structure of that community. By ingroup relations, Blau (1977) suggests that the bond may entail domination, exploitation, and conflict, as well as reciprocal regard, mutual support, and cooperation.

Thus, Blau (1977:11) defines social integration in terms of the face-to-face associations among the members of a community. However, he forewarns that the integration of members and the strata - various aspects of social differentiation such as class, occupational types, and income differentials - in the community cannot rest solely on their functional interdependence: it requires some actual interaction among the members (Blau, 1977).

Ralph Linton's (1936) paradigm of social integration emphasizes the importance of cultural integration among members of a given society - in particular, traditional society, such as that of the Malay peasant producers community - as a control gauge. This gauge can prevent consequent destruction of a society which might result from certain

role-dysfunctions. In his analysis of the adaptation of the Tanala community of Western Madagascar to the cultivation of wet rice (1936:358-363), the degree of integration which is required by members of this community to gradually maintain communal cohesion lies in their ability to adjust to the new cultural practices of rice cultivation.

Thus, Linton (1936) espouses a firm conviction that "the process of integration is constantly going on in all cultures and, carried to its logical conclusion, would eventually result in perfect internal and external adjustment, with the consequent elimination of all necessity for change." This 'necessity for change', as we shall see in the forthcoming discussion, refers to the decision to migrate by the migrants, as compared to the non-migrants, as a result of the unfavorable integration into their community of origin (Goldscheider, 1971; Glasgow and Sofranko, 1980; Abeysekera, 1984).

Among members of the Malay peasant producers community, age, education, dependent children, total family, kinship closeness, farm size, land tenure status, employment status, political commitment, perceived access to development accelerators, poverty status, and perceived political participation, are related one way or another to perceived social integration within their community (Fisk, 1964; Swift, 1965, 1967; Wilson, 1967; Banks, 1972; Ali, 1975, 1981; Bailey, 1975, 1983; Haji Omar, 1973, 1978; Kuchiba et al., 1979; De Koninck, 1976; Gibbons et al., 1980, 1981; Horrii, 1981; Shari and Sundaram, 1982; Shukur Kassim et al., 1983, 1984a; Scott, 1983; Wan Hashim, 1984).

Among the determinants of migration: - rural-urban, inter-rural or

inter-urban - some of the above variables have been found by various authors (Wikramatileke, 1965; Nagata, 1974; McGee, 1975; Provencher, 1976; MacAndrew and Yamamoto, 1975; Narayanan, 1975; Abdullah, 1976; Young, 1978; Pryor, 1979; Selvaratnam and Dissanayake, 1979; Kaplan et al., 1977; Sulaiman, 1981) to have effected the decision to migrate by both potential and actual migrants in West Malaysia.

To recapitulate, social integration is indeed a broad concept and the present study is narrowing its conceptual definition to the persistence of strong ties and attachment to the community. From Rossi's (1972) work, social integration emanates from the extent to which residents of an area are linked by ties of exchange in social, economic, and political transactions, which have been traditionally indexed by measures of formal and informal participation, place of acquisition of consumer goods and services, and the presence or absence of friendships.

Glasgow and Sofranko (1980) assert that general community involvement and organizational participation among members of that community are very significant for the perpetuation of such an atmosphere of social integration, because social anchorage in and an identity with the place of residence, are well secured.

Rossi (1972) and Glasgow and Sofranko (1980) have included a number of types of social integration persisting within an area or a community. Rossi (1972:95) lists two kinds of social integration, namely total integration and segmental integration. Total integration as the extent to which all the significant ties of exchange entered into by residents

of a community are with other residents outside their community. Blau (1977:131) terms this intergroup social integration.

Segmental integration refers to the extent to which ties of particular types are formed among residents of a community or locality (Rossi, 1972:95). This kind of social integration is what is referred to as in-group social integration by Blau (1977:5). Within the segmental integration, Rossi (1972:95) lists the vertical segmental integration and horizontal segmental integration. The former refers to the density of ties of specific types in a residential locality, which is manifested in terms of purchasing heavy durable goods within the locality, membership in community associations, friendships, etc.; and the latter reflects the singling out of the types of individuals and households among whom ties are developed. These individuals or households may reflect various race, ethnic, and socio-economic status groups.

Glasgow and Sofranko (1980:95) introduced three types of social integration-residual, service sector, and comparative integration. These types of integration are very relevant to return migrants, as in the case of the migration turnaround in the United States (Sofranko and Williams, 1980; Campbell and Garkovich, 1984).

Residual integration refers to the frequency of return visits and the types of contacts that are maintained with the former residence; the service sector integration refers to the distance travelled to acquire a number of goods and services; while the comparative integration is indicative of how migrants compare with the residents on

measures of general community involvement (Glasgow and Sofranko, 1980).

As these types of social integration would also prevail among village communities in West Malaysia, their inclusion in the study will highlight the generalizability of such a situation across human societies.

Factors Influencing Malay Peasants Social Integration and as Determinants of Migration

Empirical studies designed to measure social integration of Malay peasant producers into their communities have not been undertaken. However, social indicators of development (Arief, 1982; Mangahas, 1983) for the country as a whole have been developed and used for development policy formulation. As such, factors that could strongly discriminate between the migrant and the non-migrant peasant, as well as those which influence the perception of social integration among them, will have to be derived from various ethnographic, social-anthropological, political-economic, and development-related studies.

On the other hand, the determinants of migration for Malaysian society have been empirically studied. Reviewing them as discriminant factors for the two groups of migrants and non-migrants is desirable, in addition to providing an understanding of their roles in influencing the criterion variables, such as perceived social integration, access to development accelerators, political participation, and poverty status. This section hopes to fulfill this objective.

Education

Education is a continuous process of human development, and among the members of the peasant community in West Malaysia, it acts as a force in the socialization process (Haji Omar, 1973). People with a certain educational background - religious or secular - are highly respected within the context of peasant community. For instance, Kuchiba et al. (1979:126) discovered that learned villagers in Islamic teachings earn the respect of their fellow villagers, and thus are considered as highly integrated into their community. They are the source of knowledge not only on religious interpretations and guidance, but also as mediators and witnesses (Bailey, 1975) for rituals such as the marriage ceremony and funeral rites.

Kuchiba et al. (1979) also observed that even youth who received secular education, in the village where he conducted his study, respected the religious teachers and their students. By the same token, the same prestige is awarded to the primary (secular) school teachers who are residents in the villages (Baharuddin, 1979). These teachers, besides enjoying a higher standard of living (Kuchiba et al., 1979), are the best informed group at the village level (Baharuddin, 1979).

Among the village local leaders and functionaries who are treated by the villagers with high esteem (Ali, 1975) are those persons who have either gained formal or informal secular or religious education. Consequently, their active participation in local level political activities is inherent in their being well-informed of the potential benefits to be realized from being involved in such activities. Being

educated provides a person with information which could lead to greater or extensive access to development information and accelerators (Sulaiman, 1981). This is important for its use as a force to gain access to production credits, or to become members of various socio-economic organizations.

Education is also important for the peasants because a lack of an appreciable level has always been associated with poverty (Gibbons et al., 1980). To ensure that their children will not fall into the same poverty trap, peasants now place a high priority on their children's education, knowing not only that it will help to boost their social status, but it will also help them to gain better paying jobs (Snodgrass, 1980). The return of successful peasants' children to their village during vacations have sparked emotional pride and satisfaction in the community for the high educational attainment level that these children acquired.

Apparently, as education acts as an integrating element among and between various ethnic groups in the country (Ness, 1967), Wilson (1967:136) asserts that within a village community, there are occasions when educational attainment has been highly abused by the educated. In the village where he conducted his ethnographic study, Wilson (1967) observed that the educated people, such as school teachers, clerks, or even the "penghulu" (head of a group of villages called mukim), tended to segregate among themselves during certain gatherings. Thus, Wilson (1967:136) affirms that "the possession of an education creates common bonds and social preference between the educated and puts up barriers

between those who are and those who are not educated."

As a determinant of migration, low as well as high levels of education have been found to be true in developing countries. In general, higher education is highly associated with the decision to migrate (Shaw, 1975; Young 1978; Todaro, 1977; Pryor, 1979). However, Ulack (1979), Connel et al. (1976), and Sulaiman (1981) agree that inter-rural migrants possess a low level of educational attainment, while those inter-urban migrants have a higher educational level (Tapinos and Piotrow, 1978; Pryor, 1979; Sulaiman, 1981).

Age

Within the Malay peasant community, age has been highly associated with wisdom (Haji Omar, 1972; Bailey, 1975; Ali, 1975). Afifuddin Haji Omar (1972:16) asserts that the clause "makan garam dulu" or the first to taste salt, is taken to reflect the authenticity and legitimacy of activities undertaken by people who are relatively older than those to whom the aforementioned expression is directed. Age is highly correlated with experience.

In selecting a person or persons to assume various positions within the village non-governmental organizations, such as the cooperative organization, crockery associations, and the funeral home association, Syed Husin Ali (1975), Afifuddin Haji Omar (1972), and Kuchiba et al. (1979) agree that the elderly persons will be unanimous choices for the leadership positions. In his study of the Malay peasant society and leadership in three different village communities of the states of Kedah, Johor, and Kelantan, Syed Husin Ali (1975) observed that the

association of older persons with social differentiation and stratification is inherent in their accumulated knowledge of and experience with the development of these village communities.

This observation is congruous with Goldscheider's (1971:311-312) assertion that "the significance of age categories from sociological perspective revolves around role differentiation and structural integration.... At different age stages, different tasks are performed and different roles in relation to other members of society are defined."

As an example, within the Malay family group, older siblings have the responsibility of caring for the younger ones, teaching them some basic skills such as how to take care of themselves at home and while helping out in the rice fields (Banks, 1972). This finding is strongly supported by Bailey (1975), as he observed that prestige and respect in rural Malay society is highly associated with an increase in age. Within the communities of the Sik district in Kedah, he states that children learn to distinguish their position, namely elder brothers and sisters and younger siblings, during their daily conversations (Bailey, 1975:9). The manner of addressing the elder siblings or even older members of the village community is done with due respect.

The importance of elderly individuals in village communities as reference persons was also observed by Syed Husin Ali (1975). This is again in agreement with Goldscheider's (1971:312) argument that "age-related roles are intertwined with structural features of society—particularly kinship-family and economic-occupational systems." Shaw

(1975:18) maintains that older persons are apt to be restrained by a host of more permanent social and economic ties in their community or place of residence. In this regard, the author implies that stronger social integration with the community is associated with older people.

The evidence that older people have more economic and social investments, which make them satisfied with their present place of residence, has also been found by Speare (1974) and Bach and Smith (1977). Thus, there is a discriminating function for the decision to migrate between younger and older persons. Goldscheider (1971) maintains that not all younger persons migrate, and likewise, not all older persons are readily mobile. Since such a situation does persist (Shaw, 1975; Glasgow and Sofranko, 1980; Sofranko and Williams, 1980; Campbell and Garkovich, 1984), how is it explained without offering social integration as one of the possible reasons?

It is within this contextual argument that Goldscheider (1971) maintains that age categories are thus the connecting links, and become the organizing points of reference for the major structures of the society. In another instance, the author confirms that older persons are more integrated in the community through family, friends, and consequently, are much more sure of being residentially stable than younger persons who are devoid of social and economic investments.

Among the elderly persons within the village communities of West Malaysia, strong ties to families, kin-folks, and the structural link to the society inherent in their leadership, as well as reference person roles, have been confirmed (Haji Omar, 1972; Bailey, 1975; Ali, 1975).

All these ties influence their social integration in their communities.

Thus, many studies in West Malaysia (Nagata, 1974; Narayanan, 1975; Kaplan et al., 1977; Pryor, 1979; Sulaiman, 1981) confirmed that age as determinant of migration revolves around those between the ages of 20 to 24 years. However, Young (1978) and Sulaiman (1981) agree that rural-rural migrants tend to be older, as compared to rural-urban migrants. This finding may explain the influence of social integration to the decision to migrate in West Malaysia. As Hoffmann-Nowotny (1981) argues, a person will improve his social status, such as attempting to find a new place where he could gain social integration, through out-migration.

Besides being an influential factor in affecting social integration, and as a determinant of migration, age is also found to be associated with access to development accelerators, such as production credits (Shari and Sundaram, 1982; Bailey, 1983) and political participation (Baharuddin, 1983; Wan Hashim, 1984). As respect is bestowed on the elderly in the village communities, political parties would work through them to establish their networks at the village level (Ali, 1975; Wan Hashim, 1984).

Dependent children

Among members of traditional societies, children are considered valuable assets (Linton, 1936; Fisk, 1964; Ali, 1975). This association between children and valuable assets is held among the Malay peasant communities in West Malaysia.

The presence of a large number of children would effect low

geographical mobility among peasant producers (Sulaiman, 1981) because the feeling is that their ties to the present community are somehow much greater, particularly as the number of children they have increases. During various activities or special occasions, villagers tend to compare themselves from the perspective of the number of children they have (Swift, 1965).

Considering children as valuable assets (Fisk, 1964) has often resulted in the peasant poverty. Shukur Kassim et al. (1983) suggest that one of the root causes of poverty in the rural area is the rapid growth of rural population. This growth is highly associated with the annual increase in the number of dependent children. Despite the effort to increase their access to development accelerators such as land and production credits through competition to join the FELDA or FELCRA land development scheme, their record of active political participation may suppress the hope (Ali, 1979). Dependent children have been one of the important criteria for a peasant's selection as a participant in the land development project (Baharin and Perera, 1977). The more dependent children one has, the greater his chances of being selected.

Since the opportunity to gain access to such a development project is often slim, the process of agricultural involution (Geertz, 1963) in their villages of origin will persist. It seems as though by actively participating in local politics, one may gain easy access to development accelerators. According to a study on technical social progress for the regions in West Malaysia and Indonesia, Gibbons et al. (1980) discovered that the hypothesis is true for the case of the Achehnese peasants. In

the case of the Malaysian peasants, both peasants who are active and not active in political participation do not gain benefits for their children's well-being.

Bach and Smith (1977) discovered that dependent children are expected to have a direct effect on one's satisfaction with his place of residence. Both authors assert that the presence of dependent children should have a negative effect on actual migration. This concept is supported by Shaw (1975), as he argues that the greater the number of dependent children one has, the more ties one will have with the present community, and thus will be less likely to migrate. In West Malaysia, Pryor (1979) implies that migrants tend to have a smaller family size, which reflects the concept that a greater number of dependent children inhibit actual migration. This supports the Kaplan et al. (1977) findings that the potential migrants in West Malaysia tend to be those with a smaller family size.

Total family and kinship closeness

In the previous chapter, the discussion of the Malay peasant society stressed the formation of village communities as a result of the existence and prevalence of strong kinship ties among members of these village communities (Swift, 1965; Wilson, 1967; Bailey, 1975, 1983; Ali, 1975, 1981; Kuchiba et al., 1979; Horrii, 1981). At the same time, these authors point out that in village communities of West Malaysia, the total number of family with kinship relations for each villager is always more than one.

The more the number of total family one has, and the greater one

perceives kinship closeness among kin-folk, the stronger the social cohesion and attachment one will have to his community (Ali, 1975). This cohesion and attachment is manifested in the members social participation in activities such as "gotong-royong" or mutual help in moving a neighbor's house, building village roads and bridges, and being involved in the planning and actual work of preparing for a wedding celebration of a member's child (Haji Omar, 1973, 1978; Ali, 1975; Horrii, 1981; Bailey, 1983).

There is no doubt that this situation within the Malay communities supports Goldscheider's (1971:313) affirmation that family ties are related to social and community integration, and hence, affect geographical mobility. The same situation is true in the case of the Sri Lankan rice peasant community. Abeysekera (1984:152) observed that one of the variables that influenced the level of social integration, as well as explained over 30 percent of the variance among the non-migrants within the Sri Lankan rice peasant community, was the perception of close relatives. The author concludes that kinship ties have a positive correlation to social integration, and thus inhibit rice peasants from out-migration (Abeysekera, 1984). This findings supports the statement made by Blau (1977:131) that kinship ties are the source of integration in traditional societies.

Also within the Malay community, Fisk (1964:18) confirmed that the presence of family ties - extended in the community of origin and other social institutions - inhibits members from outmigration. This is not the only role the kinship tie has; economic aids are also extended to

those kin who live in poverty. Wan Hashim (1984) implies that the presence of a large number of total family, and the perceived kinship closeness in village communities, motivate members to participate in social, economic, and political activities.

Afifuddin Haji Omar (1978), Mohd. Shadli Abdullah (1978) and Gibbons et al. (1981) discovered that among the rice peasant communities in the state of Kedah, land tenure arrangements among kinsmen predominates. This is a source of help to relatives who are already living in poverty, because certain land tenure arrangements do not involve a rent-paying contract. Hence, this will surely alleviate the problem of low net farm income, since the rental cost is eliminated.

In the words of David J. Banks (1972:1256), "traditionally, the household represented the crystallization of kinship sentiments and relationships in society.... In traditional Malay kinship, common household residence is the basis for primary kinship bonds...the household is conceived of as deriving its corporate unity from the power of its internal bonds of solidarity."

The above admonition could be the answer to why some of the spontaneous rural-rural migrants in the 1978/80 study have placed family feuds or misunderstandings with their kin-folk in their villages of origin as their main reason for out-migration (Haji Bakar et al., 1980). By the same token, Banks (1972) asserts that kinship closeness is more predominant among siblings rather than between cousins, uncles, and other distant relatives.

Farm size operation and land tenure status

The persistent polarization of rice land ownership and operation in West Malaysia (Selvadurai, 1978; Baharuddin, 1979; Halim, 1980) generally, and in the Muda area (Haji Omar, 1978; Gibbons et al., 1980, 1981; Shari and Sundaram, 1982; Scott, 1983; Shukur Kassim et al., 1984a) in particular, has been well-documented. Likewise, the land tenure in the country as a whole, and in the Muda area in particular, has created a diversity of tenancy arrangements (Haji Omar, 1978; Selvadurai, 1978; Abdullah, 1978; Gibbons et al., 1980, 1981; Bailey, 1983).

Selvadurai (1978:49) reports that the average rice farm size in the whole country is approximately 1.25 hectares (3.1 acres). In fact, very few rice cultivators operate farms of more than 4.05 hectares (10 acres). Most of them operate a farm size between 0.90 hectares (2 acres) and 2.02 hectares (5 acres). This is one of the root causes of poverty among the rice peasantry in West Malaysia (Shukur Kassim et al., 1983). According to Arope and Lai (1971), a rice cultivator needs to operate a minimum of about 2.43 hectares (6 acres) to gain an optimal income above the poverty line.

The history of the polarization of farm size operation and distribution dates back to when rice was commercially planted in the 19th century (Horrii, 1981). However, in 1966, a Gini index of 0.354 for farm size distribution was revealed in the Muda area (Ministry of Agriculture, 1967). The situation has not improved substantially because during the 1972/73 and 1975/76 planting seasons, this index

fluctuated from 0.360 to 0.406, respectively, (Gibbons et al., 1981). The situation influences the persistent lower standard of living among the rice peasantry in West Malaysia in general, and in the Muda area in particular.

The land tenure too, has not been favorable to the rice cultivation peasantry. Selvadurai (1978) reports that 40 percent of the peasants were tenants who rented land from either absentee landlords or kin-folk in the 1970s. Within the Muda area, Gibbons et al. (1981) discovered that 57.8 percent of the tenancy arrangement were contracted between kin-folk. From this contract, 80.5 percent was agreed on cash rent, 15.9 percent on rent in kind (padi), and 3.7 percent on a leasehold arrangement. It seems that three types of land tenure status exist in the Muda area, and this classification is virtually consistent elsewhere.

The three types of land tenure status are the owner-operator, owner-tenant, and tenant-operator. An owner-operator is a farmer who operates his own farmland, an owner-tenant operates his own land and rents from other farmers or landlords. A tenant-operator operates purely rented land. This classification is apparently found to be universal in the case of the West Malaysian rice peasant producers subsector (Haji Omar, 1978; Baharuddin, 1979; Halim, 1980; Shari and Sundaram, 1982), despite the fact that some literature on rice peasantry have also included the landless agricultural laborers as another tenurial category (Gibbons et al., 1980, 1981; Bailey, 1983).

Since land tenure arrangements involve kin-folk (Haji Omar, 1978;

Abdullah, 1978; Gibbons et al., 1981), an atmosphere which enhances strong ties and cohesion among members of the rice peasant producers communities is possible. Undoubtedly, this further strengthens social integration among them in particular, and within their communities, in general. Being able to rely on kin-folk for an extra piece of farmland by those without or just with a small plot (Gibbons et al., 1981), is one way to assure that one may not be displaced from his community of origin due to the acquisition of farmland by the landlord (Jegatheesan, 1977).

However, a source of conflict and social disintegration may be found in the kinship tenure arrangement. The advent of the distribution of production input, cash subsidies, and farm mechanization provides an incentive to operate a larger piece of farmland. This may cause rapid farm operation turnover or acquisition of land by relative-landlords for their own operation (Scott, 1983; Shukur Kassim et al., 1984a). Between the 1972/73 and 1975/76 seasons the number of tenant farmers displaced was quite substantial, (Gibbons et al., 1981) indicating that the incidents could continue to prevail in the future.

In another study, Bailey (1983) asserts that the land tenure arrangement among rice peasant producers of Gong Guncil, a village in Trengganu, involved mostly tenants and non-kin landlords. Land tenure arrangements in this village have become the source of community integration, because during a bad crop season, landlords often provide help to the tenant farmers who face crop failure. Landlords have even prohibited tenants from paying rents. Bailey (1983) continues, that in

cases where the landlords refused to help out tenants in times of need, labor boycotts against the particular landlord were organized by members of the community.

A clearcut implication from the above discussion is that land tenure status, through kinship relations and as a structural element within the Malay rice peasant communities, influences social integration among members. Farm size may influence social integration in that the big operators attain prestige recognition for being hardworking and resourceful by other community members. Hard work among Malay peasants is something of high value (Alatas, 1973).

Big farm operators also have an easier chance of gaining access to development accelerators such as land, credits, and farm capital (Shari and Sundaram, 1982; Said, 1985). In the Muda area, their political participation also has a bearing on the size of farm they operate (Shari and Sundaram, 1982). Therefore, through such an association, big farmers are always safe from the persistence of poverty, while small farm operators are not.

Out-migration caused by a lack of access to farmland in developing countries (Connel et al., 1976; Findley, 1977; Todaro, 1977; Jones, 1978; Shari and Sundaram, 1982; Bell et al., 1982) might stem from the fact that even kin-folk cannot afford to share an existing small plot of farmland with the increasing number of relatives vying for the same scarce resource. Out-migration by some members with kinship ties may have been caused by the acquisition of farmland by landlords, as well as kin-folk who had earlier rented out land to relatives.

Sulaiman (1981), in his review of the determinant of migration in West Malaysia, could not identify any empirical data to prove that the lack of access to farmland caused peasants to out-migrate. However, according to a study conducted by the Center for Policy Research (Haji Bakar et al., 1980), 82.6 percent of the total 730 spontaneous rural-rural migrants from the state of Kedah to Trans-Perak out-migrated from their villages of origin because they did not have access to farmland.

The above spontaneous rural-rural migrants were originally either owner-tenants or tenant-operators (Haji Bakar et al., 1980). For those who own land, the size was too small to support their families. Thus, while both farm size operation and land tenure status may influence their social integration into the community of origin, the two factors also act as the determinants of rural-rural migration.

Employment status

Early studies and reports pertinent to Malay peasantry associated the Malay peasants with laziness (Ness, 1967). This particular view has somewhat changed however, as many foreign researchers are now beginning to observe their diligence in working on, as well as off, the farm (Corner, 1980; Bailey, 1975, 1983; Horrii, 1981). According to Lim (1976), the British colonialists purposely fabricated the picture that Malay peasants were lazy, in order to continue to exploit the indigenous Malay population.

Bailey (1983) expressed strong refutation against any claim that the Malay peasants are lazy. In the three villages of Gong Guncil, Mangkok, and Kampong Dusun, the author observed the persistence and

diligence of peasant producers at work. He (Bailey, 1983) agrees with Lim (1976) and Baharuddin (1979) that laziness among the Malay peasants is not an inborn trait, rather, it is the lack of access to farmland and information about the availability of jobs that keep most of them either unemployed or under-employed.

These cases of disguised unemployment among the Malay peasant (Haji Omar, 1978; Baharuddin, 1979; Halim, 1981) have become worse particularly among rice peasant producers in isolated villages. All land surrounding them belongs to either absentee landlords or to the operating owners. Sometimes they could not compete against big farm operators due to increasing rental rates (Siwar, 1976). Often times the landless agricultural laborers found in some villages have been unemployed for months (Scott, 1983; Shukur Kassim et al., 1984a). To accuse them of not being persistent in search for work would be unbecoming, because even in the rural areas, jobs seem difficult to come by.

Syed Husin Alatas (1973) asserts that being Muslim, Malay peasants understand the status of being employed. The teachings of Islam provide them with evidence of the prophet's sayings that to have an occupation as simple as a firewood gatherer is better than begging. As such, peasants realize that being unemployed is often ridiculed by other villagers (Scott, 1983; Shukur Kassim et al., 1984a). Those who are unemployed or part-time employees live in poverty in their villages (Scott, 1983; Shukur Kassim et al., 1984a) because opportunities for off-farm work are very scarce (Shukur Kassim et al., 1983).

To be strongly integrated in a village community, employment status is very important (Scott, 1983). In his study of the Malay peasants of Kampong Sungai Bujur in Yan district, the author discovered that an unemployed person is always poor, and their poverty is a source of dismay within the village.

Abeysekera (1984:157) maintains that in the rural communities of Sri Lanka where social differentiation is at a minimum, the functional equivalent of "unemployment" is the lack of integration into communal life. This absence of integration undermines the very source of livelihood because, at the subsistence level, all members of the community need to cooperate for joint survival. Therefore, any type of employment is important and dignified.

Unfortunately, in the case of the Malaysian peasantry, when the polarization of access to factors of production is unending (Shari and Sundaram, 1982; Scott, 1983; Shukur Kassim et al., 1984a), community differentiation becomes more prominent (Ali, 1975). This dividing line has also meandered into the political dimension of the local level activities (Scott, 1983). As a result, many of the unemployed would prefer to out-migrate (Kaplan et al., 1977; Sulaiman, 1981) despite those who may have full employment doing the same thing (Abdullah, 1976). However, the peasants out-migration has been very closely associated to illegal government-land colonization (Ali, 1975).

Political commitment

Political commitment among the Malay peasantry in West Malaysia dates back to the early 1940s when the spirit of nationalism began to

press Malay leaders into fighting for the country's independence (Means, 1970). The formation and mobilization of various Malay formal and informal political organizations, as was mentioned earlier, triggered the Malay peasants to contribute and get involved in these political movements (Ali, 1981). However, the persistence of a dualistic local political arena does create social disintegration (Scott, 1983; Shukur Kassim et al., 1983) according to Blau (1977). Village members supporting a certain political party, according to Scott (1983), will tend to group together, while those supporting another party will segregate among themselves.

This trend of commitment and segregation has caught those who do not commit themselves to any political party in the middle of the conflict. During a political election campaign, both political parties will try to influence the uncommitted to take sides with them, and incentives for their future well-being are promised (Baharuddin, 1983). Gibbons et al. (1980) observed that those who are politically committed in the villages still do not benefit much at the local level, in particular when their participation is meager. However, in an overall distribution of access to development accelerators such as agricultural services, credits, and subsidies, they stand a better chance of being included in the group receiving such facilities (Shari and Sundaram, 1982; Baharuddin, 1983; Shukur Kassim et al., 1983).

Within villages where all members are fully committed to a political party, social integration would be the strongest (Scott, 1983). However, when there are two parties contending for support from

the same group of villagers, problems arise to the extent where the use of boycotting marriage festivities and funeral rites have been reported (Scott, 1983). Sometimes, the government institutions have been found to further aggravate the already tense situation in the village (Baharuddin, 1983; Shukur Kassim et al., 1983). The preclusion of members from another political party, or even those who do not indicate any commitment to politics from getting various agricultural subsidies, has further inflamed an already aggravated social integration among village community members.

Thus, lack of access to these accelerators for development (Shari and Sundaram, 1982; Baharuddin, 1983) will further perpetuate an already rampant incidence of rural poverty among the uncommitted rice peasants, many of whom had out-migrated from their villages (Haji Bakar et al., 1980).

Access to development accelerators

Agriculture in most developing countries is characterized by low productivity, high polarization in farm size and land ownership, inequality in attaining access to farm credits, and the persistence of poverty among the agricultural households (Hartmann and Boyce, 1977; Mellor, 1976; Patnaik, 1979; Gibbons et al., 1980; Pearse, 1980; Shari and Sundaram, 1982; Taylor, 1981). The persistent application of the neo-classical approach to agricultural development (Mellor, 1976; Taylor, 1981) in some of these countries seems to have fallen short of the objective of improving the standard of living among poor agricultural households (Hartmann and Boyce, 1977; Pearse, 1980;

Gibbons, 1984).

In Bangladesh, Hartmann and Boyce (1977) argue that the availability of factors of production, particularly land and other natural resources are indeed abundant. Unfortunately, peasants still live in destitution. Their basic assumption and reason for the persistence of such a situation lies in the monopolistic nature of ownership of those factors of production (Hartmann and Boyce, 1977). In West Malaysia, this argument has been consistently observed in various related studies (Baharuddin, 1979; Halim, 1980; Gibbons et al., 1980; Shari and Sundaram, 1982; Scott, 1983; Shukur Kassim et al., 1984a).

Within the neo-classical approach to agricultural development, Mellor (1976) suggests that the existing structure of agriculture can be left as it is while the improvement in terms of productivity, hence, the standard of living of farm households, could be improved through the introduction of the essentials and accelerators for agricultural development (Mosher, 1966).

According to Mosher (1966), the essentials for agricultural development are transportation, markets for agricultural products, new farm technology, availability of purchasable inputs, and various incentives for farm households to continue their farming operation. Accelerators for agricultural development on the other hand, include farmers' education, production credits, farmers organizations or associations, and improving or expanding land base and planning (Mosher, 1966).

As a country that adheres to the neo-classical approach to agricultural development, all these essentials and accelerators for agricultural development exist in West Malaysia (Taylor, 1981; Pearse, 1980). However, it would be foolish to assume that all farm households have an equal access to the various accelerators for agricultural development (De Koninck, 1976; Shari and Sundaram, 1982; Baharuddin, 1983; Shukur Kassim et al., 1984a). In his study on the politics of poverty eradication in West Malaysia, Baharuddin (1983) maintains that for farm households to gain access to any kind of development accelerators, they will have to establish and maintain good personal relationships with the local politicians.

Admittedly, political commitment is highly related to a person's access to accelerators for agricultural development. In a locality where a single political party, in particular the ruling party dominates, strong social integration among members will persist. Ishak Shari and Jomo Sundaram (1982) agree. According to them, farm households who have good contacts with local politicians and personnel in the Farmers Organization Authority in the Muda area have easier access to farm credits and agricultural subsidies (Shari and Sundaram, 1982).

Therefore, it would seem to be appropriate to state that the political commitment of members of the rice peasant producers community will have a high association to access to development accelerators. Likewise, having kin-folk in leadership roles may aid a peasant in gaining access to these accelerators (Baharuddin, 1983).

As members of the peasant producers community gain access to development accelerators, their farm size operation - whether in terms of owner-operators, owner-tenants, or pure tenants status - will definitely ensure their satisfaction with the present community. Such an atmosphere will surely result in strong integration into their community, which will then inhibit any person's propensity to out-migrate from his present residential locality (Speare, 1974; Bach and Smith, 1977).

In a study conducted on the spontaneous rural-rural migration among the rice peasant producers in Kedah, lack of this access has partly resulted in a decision to out-migrate (Haji Bakar et al., 1979, 1980). In other cases, Syed Husin Ali (1975) maintains that out-migration persists for the same reason. Illegal land colonization in Teluk Gong and Binjai Patah in Selangor was the result of the peasants dismay over their lack of access to improving and expanding land use, an accelerator for agricultural development listed by Mosher (1966).

However, when steps are taken by the government authority to evict them, peasants have no choice but to take heed of the injunction. Oftentimes their frustration, inherent in the total failure to get their newly colonized land, has resulted in riots against government authorities (Wan Hashim, 1984).

Poverty status

Webster (1984) claims that poverty is a relative term which can only be defined by comparing circumstances of one group of people (or an entire economy) with another. Snodgrass (1980) agrees, but asserts

that in general, there is no one accepted definition of poverty.

The concept of poverty has been operationalized in at least two fundamental ways. According to Webster (1984), the first conceptual framework of poverty reflects the subsistence, while the second revolves around the relative deprivation. In the subsistence perspective, the operationalization method looks at what has been popularly known as the basic needs angle (Gibbons, 1984). It is based on the level of income which could provide the basic requirements of a household including food, health and nutritional care, education, and minimum clothing needs.

The relative deprivation approach looks at whether a person's or family's income deprives him or his whole family from having the requirements expected by his culture and customs to live a normal economic existence (Townsend, 1979). For instance, if having a telephone, car, freezer, stove, or a proportionate number of bedrooms for a particular size of family is a basic requirement for a family living in the United States, then those who cannot afford to have these necessities are considered relatively deprived families. Thus, for the developing societies, the basic necessities must be based on their customary and cultural requirements, when one uses this approach to measure poverty status.

This approach has its strength because poverty status is seen "as a process of encroaching deprivation by which people gradually slip out of the mainstream of social life, almost unnoticeably, without being the stereotype paupers in rags and tatters" (Webster, 1984:21). Townsend's

(1979:31) rationale in this approach can be seen in the following argument:

"Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are in effect, excluded from ordinary living patterns, customs and activities."

According to Webster (1984), criticism of this approach revolves around the chosen or selected taste of living by a certain group of people or culture. For instance, for vegetarians, not having meat in their diets does not mean that they are deprived of such a necessity for a complete nutritional supplement in daily life, but their sheer philosophy precludes them from eating meat. Hence, Townsend (1979) has failed to distinguish between the personal taste of an individual or group and the true basic needs in relation to 'a customary style of living' in his yardstick (Webster, 1984).

In West Malaysia, the poverty line has been established by using the income approach, which is similar to the subsistence approach. However, the manner of deriving the income level seems to be rather crude, because the income identified does not take into consideration what has been spent by the individuals. Even if they are deriving income above the calculated poverty income line, will they chose to purchase goods and health services required to lead a healthy life? It is within this contextual argument that Gibbons (1984) suggests that the employment of the basic needs approach in deriving the poverty line

income in the country will be more comprehensive. Factors such as nutrition, education, health, sanitation, clothing and other related measures of the quality of life will be included to determine the overall poverty situation of a population.

Based on an income approach, most of the rice peasant producers in the country are poor. For the 1972/73 season, Lai (1977) discovered that in the Muda area, over 60 percent of the farm households lived under the poverty income line of Malaysian \$28.00 per capita per month. As discussed earlier, the incidence of poverty within the agricultural sector in West Malaysia has been the worst, and among the rice peasant producers, the reduction of this incidence has been quite slow (Malaysia, 1981).

To reiterate, poverty is caused by a number of factors. Shukur Kassim et al. (1983) assert that the most fundamental cause is the small farm size operation and tenancy. Other causes on the list include, rapid rural population growth, which is closely associated with a large number of dependent children, stagnant yields, labor displacement, lack of attention to other crops besides rice and other employment activities, lack of opportunities for off-farm employment, and the rising costs of living within the agricultural sector.

It is also true that a low level of education is another main factor that could lead to poverty (Gibbons et al., 1980) because at such a level, an individual cannot compete for a better paying job. What is most heartbreaking among the Malay peasant community now is that being poor, a peasant is always ridiculed by fellow community members (Scott,

1983). As such, one's integration into the community is undoubtedly at stake.

Sometimes, the presence of kin-folk in the village can somehow lessen the burden. To this effect, Scott (1983) and Shukur Kassim et al. (1984a) discovered that oftentimes those kin-folk present are just managing themselves to survive at the subsistence level. Attempts to help poor kin-folk will always be difficult, particularly when the helpers themselves subsist through operating small and rented farmland.

It is, therefore, becoming common for those who are poor to grasp the opportunity to join the government's land development projects whenever such an offer is made (Kaplan et al., 1977). However, even poor people need to have relevant ties with the local politicians in order to be selected for such a project. An asset such as appropriate political commitment, as implied by Shari and Sundaram (1982), might help a person in gaining access to opportunities that could alleviate his poor living standards.

Thus, we can conclude that poverty status can affect one's social integration into the community. Poorer peasants, particularly those who do not display clear political commitment within the village political arena, will not be able to enjoy the same benefits as enjoyed by those who are politically committed.

Political participation

Political participation among the Malays of West Malaysia has been initiated through the process of political mobilization (Means, 1970), where the masses are being exposed to issues pertinent to the future

government of their country (Ali, 1981). The process of mobilization itself is made possible through the establishment of various formal and informal organizations such as the KMM, API, WAS, and UMNO, as mentioned earlier. By blowing the spirit of nationalism among the Malay masses, which also include the peasantry (Funston, 1980), membership drives for these organizations have been very encouraging.

These organizations are in fact in the initial stage of the formation of a diversity of political parties which spread even to the most isolated village in the country. A member's participation starts with a simple commitment to the party's general ideology, then joining and paying membership dues. The party's activities at the local level are headed by the "Ketua Cawangan" or the branch leader.

The next degree of participation involves attending political lectures, and providing venue or being the organizer of the lecture itself. This type of participation is very common, and a remote agricultural settlement such as an estate, peasants are becoming very involved (Ibrahim, 1983).

Wan Hashim (1984) asserts that in villages where members participate in two strongly opposed parties, the outcome will always be social disintegration. Unity and solidarity at the village level are always at stake. The situation becomes very intense, especially during election campaigns. Boycotting of village activities such as wedding festivities and religious ceremonies has been observed (Das, 1982). As a result, a person who may not be an actively participating political member of a village known to be dominated by a different political

party, may be turned down for any favor granted by organizations associated with the opposite party (Shukur Kassim et al., 1984a).

This point is strongly asserted by Baharuddin (1983) in his study of the politics of poverty eradication in a district in the state of Selangor in West Malaysia. Only those who participated in the dominant party will gain benefits, particularly in agricultural development. In the state of Kedah, Gibbons et al. (1980) discovered that both those who participate and those who do not, gained no benefit for the well-being of their children. Here, the degree of participation is perhaps the yardstick to measure access to development benefits. Likewise, actively participating in an unpopular political party may jeopardize one's future livelihood.

To recapitulate, Glasgow and Sofranko (1980), Gallin and Gallin (1980) and Tapinos and Piotrow (1978) associate political participation with social integration. In the context of West Malaysian peasantry, a lack of appropriate political party participation in a dualistic political system may not assure benefits which could improve the well-being of the participants (Baharuddin, 1983; Shukur Kassim et al., 1983, 1984a). This could also result in a massive rural exodus due to political pressures in the villages of origin (Haji Bakar et al., 1979).

Social Integration and the Decision to Migrate

Associating the idea of social integration with residential mobility, hence internal migration, owes its origin, to Goldscheider (1971:299-325). After reviewing the various determinants of internal migration, age was found to be the most consistent indicator of

migration. Thus, Goldscheider (1971:314) introduced an interesting hypothesis:

"Not all older persons are residentially stable - nor, for that matter are all younger persons mobile, or do all young adults respond equally to economic opportunity. Even among those who move as a response to economic changes or life-style factors the question remains, How do these processes relate to migration? We contend that life-cycle or economic job changes as such do not determine migration, but have the implications for the development of the community, neighborhood and family ties.... Hence our hypothesis is that social integration and residential mobility are inversely related, and that this relationship should account not only for the greater stability of the older persons and the mobility of young adults but also for mobility differentials within age groups."

Social integration, as defined earlier, reflects the persistence of attachment, ties, and coherence to one's residential locality or community. As a result, individuals could adjust to whatever changes that may take place in their community of origin, or for those who moved, changes that they are facing in the new place of residence or community of destination.

A number of studies (in developed as well as developing societies) have been undertaken since 1971 to examine the hypothesis that social integration is inversely related to migration. These studies include those of Speare (1974) and Bach and Smith (1977) on the relationship of residential satisfaction and mobility; Hennigh (1978) on the integration of new migrants to their new place of residence through active community participation; Gallin and Gallin (1980) on the integration of Taiwanese migrants to city life; Sofranko and Williams (1980) and Glasgow and Sofranko (1980) on non-metropolitan migration and their community

satisfaction and social integration into the rural neighborhood; and Hoffmann-Nowotny (1981) on the status adjustment of the potential Swedish out-migrants.

Two recent studies reported by Goldscheider (1984), which have attempted to relate social integration to the decision to migrate, are those conducted by Choi (1984) on the South Korean return migrants from the urban to the rural communities, and Abeysekera (1984) on the rural-rural migration of wet rice peasant producers in Sri Lanka.

Evidence to prove the hypothesis is also provided by these studies, while factors that may have influenced members social integration are delineated. Social integration in some of these studies appears to be the most significant discriminant function between the migrants and the non-migrants (Gallin and Gallin, 1980; Choi, 1984; Abeysekera, 1984).

As a person's satisfaction with his place of residence implies his integration to such a place or community, studies attempting to elicit this relationship are very highly related to the study of social integration among members of a given community.

Speare (1974) studied the residential mobility of Rhode Island residents who lived within the Providence-Pawtucket-Warwick SMSA, and attempted to relate their satisfaction to their residential location, their propensity to move and the actual decision to move. Using the individual or household characteristics, location characteristics (housing, job, and neighborhood region), and social bonds (Speare, 1974:176) as determinants of the satisfaction index, the author discovered that only the social bonds (friend and relatives) and age of

the household head have a positive relationship with the satisfaction index. The high level of satisfaction with the residential locality has been found to be negatively related to potential and actual mobility (a path coefficient of $-.432$ and $-.104$, respectively).

Later, Bach and Smith (1977) conducted another study using samples from Durham, North Carolina, with the purposes of providing support for Speare's (1974) hypothesis that the level of satisfaction to the residential locality influences the decision to move. Using path analysis, the authors concluded that the "major prediction of Speare's (1974) residential mobility model is substantiated for migration. In general, people who are above a threshold of dissatisfaction will plan to migrate and then, indeed, will migrate" (Bach and Smith, 1977).

Among the non-metropolitan migrants, Glasgow and Sofranko (1980) assert that the new migrants have been found to be well-integrated into the new rural neighborhood because they are able to participate in various local community activities. This has induced them to stick to the new rural residential area despite having no intention of getting over-integrated as the new migrants in Hennigh's (1978) study did. Hennigh (1978) reveals that the newcomers over-integration into the new community had made them able to control local affairs. As a result, they remained glued to the new residential location.

Another study of non-metropolitan migrants in the United States arrived at the same conclusion. Sofranko and Williams (1980) found that the links between community satisfaction and the desire to move and actual migration are quite strong. Here, community satisfaction

revolves around the ability of the migrants to adjust to the new environment through the establishment of new social ties and employment. The authors argue that "if community satisfaction reflects the strength of bonds to a place, those who are most dissatisfied with their current place of residence would be more receptive to opportunity elsewhere and thus be more likely to want to leave" (Sofranko and Williams, 1980:122).

Studies conducted among the developing societies (Gallin and Gallin, 1980; Choi, 1984; Abeysekera, 1984) have found the same results as those studies conducted in the United States. For instance, Gallin and Gallin (1980) maintain that the strong integration achieved by Hsin-hsing villagers of Taiwan, who had migrated to the city of Taipei, has actually influenced them not to return to their former villages. This integration is made possible because of the presence of kinship ties and former friends from their village of origin in the new neighborhood (Gallin and Gallin, 1980:162). In addition, the study also revealed that active participation by the migrants in most of the urban voluntary associations has resulted in their smooth adjustment, hence their ability to continually maintain a good level of social integration.

The active participation among the rural-rural migrants of South Korea in various voluntary city organizations has also inhibited them from returning to their former rural communities (Choi, 1984). In the study, Choi (1984:59) maintains that about 40 percent of the non-return migrants from Seoul, South Korea were members of one or more organizations, in contrast to only 18.3 percent of the return migrants. Thus, the author concludes that the return migrants participated less in

urban social organizations and were less attached or integrated to the urban social settings.

Finally, the study conducted by Abeysekera (1984) on rural-rural migration of rice peasant producers from the wet zone to the dry zone area of Sri Lanka has, in fact, attempted to compare migrants who are fully supported and organized by the settlement agencies and the spontaneous rural-rural migrants to the same area. Abeysekera (1984:116) actually focused on the link between the family and the community as the potential predictor to the propensity to migrate.

Factors that are emphasized include patron-client relationships, the power structure of the community, the level of integration of families into communal activities, participation in voluntary communal services, and in communal seeding and harvesting works, utilization of communal credit facilities, and perception of close relatives and kin networks. The communal seeding and harvesting works are similar to those that are done among the Malay rice peasant producers in West Malaysia (Haji Omar, 1973; Kuchiba et al., 1979; Horrii, 1981). Labor exchange seems to be universal within rice peasant communities in developing countries. The planting and harvesting stages are the two stages that require intensive labor input.

The author asserts that the hypothesis that the higher level of social integration into the community, the lower the propensity to migrate among the Sri Lankan rice peasant producers, particularly among the spontaneous migrants seemed to be significantly verifiable (Abeysekera, 1984:142). As such, those with a low level of social

integration would tend to migrate to the dry zone area. Thus, social integration among the Sri Lankan rice peasant producers acts as a very significant discriminant function separating the migrant and non-migrant peasant producers to the wet zone area.

In summary, the evidence provided by the above studies, both among developed and developing societies, are clear proof that social integration is indeed a discriminating factor that separates the migrants and the non-migrants. Social integration is actually an evaluative mechanism employed by potential migrants to make the decision of whether to migrate or stay behind. This is synonymous with the use of satisfaction as an evaluative mechanism by the residents in Rhode Island (Speare, 1974) and North Carolina (Bach and Smith, 1977) in deciding whether or not to out-migrate from their residential localities.

Summary and Conclusion

Among the traditional Malay peasant society, migration has been treated as part of a socialization process for young males to gain beneficial experience which could enhance their maturity and accumulate wisdom (Provencher, 1976:64). As rural population growth accelerates, out-migration from rural areas to other rural areas (Ali, 1975; Young, 1978; Haji Bakar et al., 1979, 1980), and to the urban centers (Nagata, 1974; McGee, 1975; Narayanan, 1975; Abdullah, 1976; Pryor, 1979) in search of a better source of income becomes quite significant.

Subsequently, internal migration in West Malaysia proliferates: the rural-urban, inter-rural, and the inter-urban migration (Aminuddin

Sulaiman, 1981). Young (1978) states that between the rural and urban regions there are subsectoral migration flows going on in the country. These include migration from the traditional-rural to traditional-urban subsector and vice versa; from modern-rural to modern-urban subsector and vice versa; and between modern-rural and traditional-urban subsector and vice versa.

Migration is the moving away of an individual or a collectivity of individuals permanently across some form of political or geographical boundary, preceded on the part of the migrants by a decision-making process (Mangalam, 1968:8). Despite a number of factors that cause population mobility, the hypothesis that social integration among community members is inversely related to migration has been verified to be true within both the developed (Speare, 1974; Bach and Smith, 1977; Rossi, 1980; Glasgow and Sofranko, 1980; Sofranko and Williams, 1980) and the developing societies (Gallin and Gallin, 1980; Choi, 1984; Abeysekera, 1984). Social integration is indeed a discriminating factor that differentiates between migrants and non-migrants.

Besides social integration, other variables such as age, education, kinship closeness, political and economic participation, employment status, dependent children, land tenure status, and total family, act as discriminant factors between migrants and non-migrants. In ethnographic and other socio-economic studies of the Malay peasant societies (Fisk, 1964; Swift, 1965; Wilson, 1967; Haji Omar, 1973, 1978; Ali, 1975, 1981; Kuchiba et al., 1979; Horrii, 1981; Bailey, 1975, 1983; Baharuddin, 1983; Scott, 1983; Gibbons et al., 1980; Shukur Kassim et

al., 1983, 1984a), the above variables have been found to influence social integration.

CHAPTER 4. THEORETICAL FRAMEWORK

The preceding chapter introduced some relevant social, economic, demographic, cultural, and political elements which discriminate between migrants and non-migrants. They have also been found to influence social integration among the Malay rice peasant producers in West Malaysia.

This chapter will begin with the discussion of some behavioral aspects of the human decision-making process. The social-psychological explanation of behavior formation will follow the Sherif (1967) and Sherif and Sherif (1969) model. A brief analysis of the structural aspects of the societal system, which entails the evaluative mechanism of social integration as employed by the community members in deciding to migrate, will be presented. In addition to this subsection, the emphasis will also be given to the prevalence of discriminating forces which differentiate one group of individuals from another.

The development of a comprehensive theoretical model enhances theory formation, particularly within various disciplines of the social sciences (Blalock, 1969; Zetterberg, 1954). As a basis of any theory, a model, which is also referred to as paradigm (Larson, 1973), can provide explanations of various relationships.

Migration as a Social Behavior

Migration may not be restricted biologically to one sex or to one age group, but it may be restricted socially (Goldscheider, 1971:49). As such, besides being a social process, it is also viewed as a social

behavior (Wolpert, 1965; Gale, 1973). The former reflects the changes that it brings about to both the receiving, as well as sending communities, when individual members of the sending community decide to out-migrate from their community of origin.

Through migration, some aspects of the societal structure will be affected such as a new person being placed in certain status-positions vacated by the out-migrant; and in the community of destination, social amenities are needed to meet the demand of the extra in-coming people. Conversely, as a social behavior, migration is a function of individual decision-making (Wolpert, 1965; Gale, 1973). Mangalam's (1968:18) definition of migration implies the behavioral nature of the phenomenon, as he asserts that the individual's migration activity is always "preceded by decision-making on the part of the migrants on the basis of a hierarchically ordered set of values or valued ends and resulting in the interactional system of the migrant."

The term behavior encompasses a very wide range of activities. According to Ellingstad and Heimstra (1974:4), an organism's or individual's behavior refers to any form of activity on the part of the organism or individual that is observable either directly or with the aid of instruments. It ranges from very subtle activities such as brain waves (Ellingstad and Heimstra, 1974), to the actual movement from one place to another, as in migration (Wolpert, 1965; Gale, 1973).

Both external and internal factors influence behavior formation by an individual. Figure 2 illustrates a causal picture of an observed behavior formation as developed by Sherif (1967). In this regard,

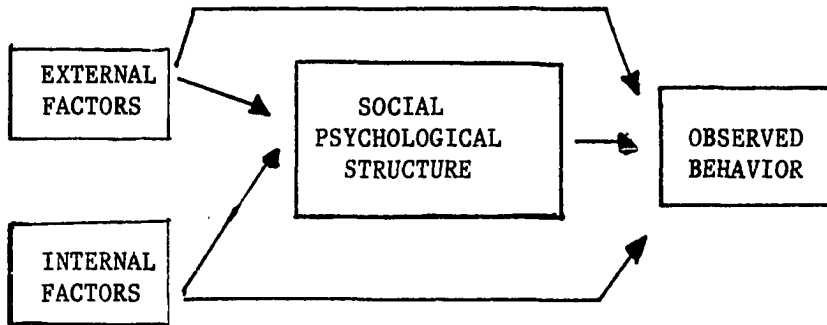


Figure 2. A causal structure of observed behavior

factors external to the individual refer to any stimulus situations such as objects, events, groups and any of their cultural products. On the other hand, the internal factors include an individual's physical make-up, emotions, attitudes, interests, and social motives. The social-psychological structuring or patterning refers to the perceptual screening or categorizing process that eliminates irrelevant sources of information (Sherif and Sherif, 1969).

In the works of Speare (1974) and Bach and Smith (1977), the perceptual screening takes the form of an evaluative mechanism employed by individuals in assessing whether or not the external and internal factors are conducive to their decision to perform the observed behavior, that is to stay behind or migrate out of the community of origin.

Sherif (1967:85-87) maintains that the observed behavior of an individual is not directly influenced by both the external and the internal factors. Rather, these antecedent factors (Sulaiman, 1981)

will first interact and then jointly determine the process of making sense out of the various influences that infringe on the individual. It is the process of psychological structuring that really influences observable behavior. The two direct arrows from the external factors and the internal factors are the presumed causal links to the observed behavior. This presumption is relevant because in other related studies observing attitude and behavior relationships, Fishbein and Ajzen (1975) argue that attitude - an internal factor as presented in the causal model - can directly influence an observed behavior.

Since migration is always preceded by a decision-making process (Mangalam, 1968; Shaw, 1975; Ritchey, 1976; De Jong and Gardner, 1981), the persistence of some sociological elements (Goldscheider, 1971) that could restrict its manifestation justifies its inclusion as a social behavior.

However, Shaw (1975), Simmons et al. (1977), Connel et al. (1976), and Findley (1977) agree that the analysis of migration is always dominated by socio-structural studies. In such studies, migration is not viewed singly, but its manifestation is always associated with the linkages it has with the prevailing social structure of the area or community where the phenomenon takes place. Mangalam (1968) implies that the decision to migrate has always been effected by the interaction system within which the migrants are involved. This study will attempt to view migration behavior from this perspective.

Discriminating Behavior and Social Integration Model

Goldscheider (1971) hypothesizes that social integration is inversely related to the decision to migrate. The perceived social integration into the community of origin is indeed a form of behavior covertly harbored by individual members of a community. As such, it may also form discriminant behavior which separates those who are mobile and those who are not.

In most internal migration studies (Speare, 1974; Bach and Smith, 1977; Rossi, 1980; Gallin and Gallin, 1980; Glasgow and Sofranko, 1980; Choi, 1984; Abeysekera, 1984) where aspects of social integration have been the main impetus of the research objective, or just a part of the explanatory relationships, the approach taken has been that of the socio-structural perspective.

Figure 3 illustrates the discriminating behavior and social integration model of the rice peasant producers in making their decision whether to stay behind or out-migrate from their community of origin. Three rings represent three different aspects of the model. The outermost ring represents the boundary of the given community of origin. The middle ring forms the enclosure for the migrant group from this community of origin. Thus, the area between the outer and the middle rings indicates the dominant location of migrants in the model.

The innermost ring represents the non-migrant group who have stayed behind when the migrants out-migrated from their community of origin. The distance between the middle and the innermost rings represents the discriminating distance of the thirteen variables which differentiate

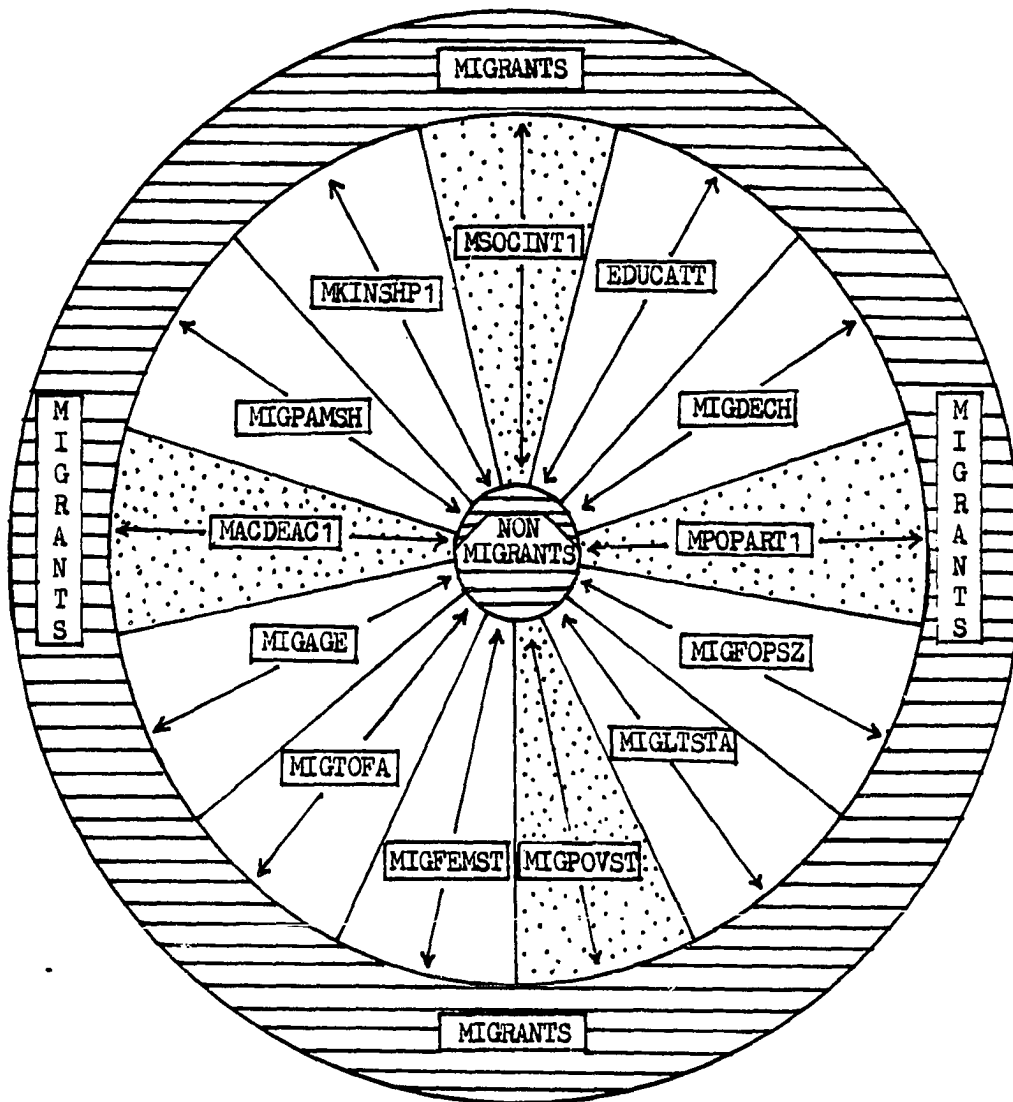


Figure 3. Discriminating behavior and social integration model

between the two groups of migrants and non-migrants. The middle ring represents an associational line which illustrates the relationship that each variable has with the other.

In discriminating between the migrant and non-migrant peasant producers, the contributions of independent variables to the dependent variables that act as discriminant forces, can also be analyzed. In this model, four dependent discriminating variables are selected. They are represented by the dotted areas of the model in Figure 3. The following is a list of both the dependent and independent variables which are also the discriminating forces separating the characteristics of the two groups from each other:

<u>VARIABLE SYMBOL</u>	<u>VARIABLE NAME</u>	<u>VARIABLE TYPE</u>
MSOCINT1 (Y ₁)	Perceived social integration	Dependent
MPOPART1 (Y ₂)	Perceived political participation	Dependent
MACDEAC1 (Y ₃)	Perceived access to development accelerators	Dependent
MIGPOVST (Y ₄)	Poverty status	Dependent
EDUCATT (X ₁)	Educational attainment	Independent
MIGAGE (X ₂)	Age	Independent
MIGDECH (X ₃)	Dependent children	Independent
MIGTOFA (X ₄)	Total number of family	Independent
MKINSHPI (X ₅)	Perceived kinship closeness	Independent
MIGFOPSZ (X ₆)	Farm size	Independent
MIGLTSTA (X ₇)	Land tenure status	Independent
MIGFEMST (X ₈)	Farm employment status	Independent

MIGPAMSH (X_9)

Political commitment

Independent

Each individual member of a community plays a certain role which helps to ensure the smooth running of various processes such as the socialization process, boundary maintenance process, reward-sanction process, and gate-keeping or legitimizing process (Loomis, 1962; Bertrand, 1972). The contribution of each member is very important for the progress of the community. However, this contribution is often determined by certain factors such as the charismatic or leadership ability, wealth, status-quo, motivation, popularity, power, influence, and authority that an individual may possess.

In a study conducted by Hoffmann-Nowotny (1981), people who outmigrated from their community of origin were found to do so because they felt that whatever characteristics they had did not offer high enough prestige and power in their community. It is their evaluation that in such a situation, to outmigrate to a new community could perhaps gain them status even with their existing characteristics. Even if this is not possible, they may be able to influence the new community's social system to reevaluate the recognition of their characteristics as ones that should be awarded higher status.

Among the rice peasant producers, the same evaluative process and mechanism is applied. Since certain basic characteristics have to be accepted by all community members as those that can guarantee the worth of an individual member to his community, failure to attain such characteristics will jeopardize his status-quo in the community. To relate this situation to the causal model of an observed behavior as

presented by Sherif (1967), both the external, as well as internal factors of the model, are found within each community member.

For instance, the external factors or characteristics which may affect peasant producers to perform the observed behavior such as out-migration or staying behind are their educational attainment level, age, the number of children and total family that they have, farm size operated, land tenure and farm employment status, poverty status, and political commitment. Their perceptions of social integration in their community, political participation, access to development accelerators, and kinship closeness form the internal factors.

As they undergo the social-psychological patterning to evaluate whether or not they are well-integrated socially in their community of origin, all aspects of their past experiences, activities and roles will be used. As they make their decision to migrate, or to stay behind, the internal and external factors that form their characteristics will differ between the two groups of those who outmigrate and those who do not. Blau's (1977) explanation of the differentiation between any distinct groups whose characteristics are not homogeneous, reflects the difference in their ways of using yardsticks to measure their integration into the entire community. These internal and external factors will also influence their evaluation of being socially integrated or not.

Summary and Conclusion

An individual's behavior is always influenced directly or indirectly by internal and the surrounding external factors (Sherif,

1967). Since migration may be restricted socially, this situation reflects the behavioral dimension that it possesses. By the same token, Wolpert (1965) and Gale (1973) agree that migration behavior is virtually a function of individual decision-making. Therefore, to study the phenomenon from the behavioral perspective is unequivocally plausible.

Man is a social creature (Linton, 1936). Naturally, his association with his community or societal system is always maintained through a bilateral or reciprocal relationship (Bertrand, 1972). His contributions will help his community to progress, and in return, a progressive community will offer satisfaction to its members. Subsequently, external factors such as the individual members characteristics, the reward-sanction system, and related structural aspects of the community will influence the members evaluation of their performance and integration into their community. Internal factors such as their own perception of their community will work in concert with the external factors in deciding what is good for them. Hence, the socio-structural analysis of migration behavior is relevant.

The discriminating behavior and social integration model is a paradigm that will classify the discriminant behavior or characteristics of the two different groups - migrants and non-migrants - that live within a single community. It attempts to explain the differences each group has compared to the other. In addition, it also tries to predict which behavior and characteristics form the strongest discriminant functions that separate the two groups from each other. In doing so,

the discriminating behavior or characteristics are also divided into dependent and independent variables, because some of them can also influence the other.

Thus, besides predicting which discriminating behavior or characteristics form the most significant discriminant functions, the model will offer a way of ascertaining the influence of the characteristics grouped under the independent variables on those grouped as the dependent variables.

As a model or paradigm is the basis of any theory (Larson, 1973), and this model can provide explanations to various relationships (Kinloch, 1977), the discriminating behavior and social integration of spontaneous rural-rural migrants in West Malaysia hope to provide some contribution to an understanding of a sociological theory of migration.

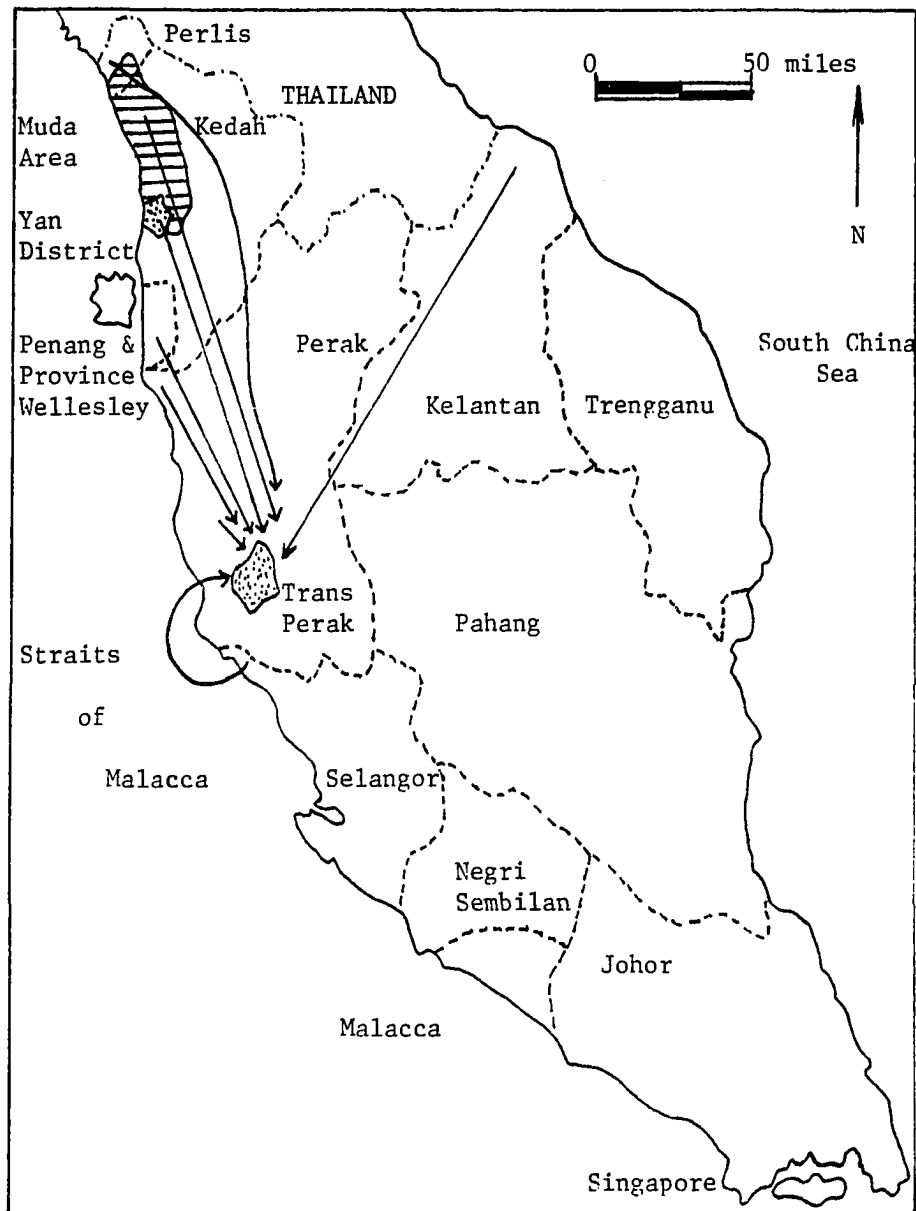
CHAPTER 5. METHODS

The intent of this study is to analyze spontaneous rural-rural migration among rice peasant producers within the context of an integrated agricultural development setting in West Malaysia. Since their migration has been traced from the Yan district in the state of Kedah to the Trans-Perak area of the state of Perak, information regarding the two areas will be relevant. Based on the discussion on the preceding three chapters, the origin of the data source, the sample selection, the data collection procedure, the study areas, the operationalization of variables, and statistical procedures employed for the analyses will be discussed in this chapter.

The Data Source

Between 1978 and 1980, the Center for Policy Research, Universiti Sains Malaysia undertook a socio-economic survey of the Trans-Perak Integrated Agricultural Development Project area. The present author was the co-ordinator of the study team. From the findings of the study, two groups of migrants were found to settle in the area. The first group was comprised of selected applicants organized to resettle in the area by the state and FELCRA authorities. The second group was made up of spontaneous migrants who came from other rural areas within the states of Perak, Kedah, Perlis, Penang and Seberang Prai, Selangor, Johor, and Kelantan.

The illustration on Map 3 is from the study conducted by the Center (Haji Bakar et al., 1980). There were various spontaneous



Map 3. West Malaysia - migration stream of peasant producers from various areas including Yan District of the Muda Region to the Trans-Perak IADP area, 1965-1975 (Source: Haji Bakar et al., 1980)

rural-rural migration streams from various states and districts to the Trans-Perak area. The majority of the migrants were from the state of Kedah, particularly from the Muda area. The majority of the migrants settled during 1970, although the earliest Kedah migrants moved into the area in the mid-1960s. As a result of the eviction exercised by the government between late 1977 and early 1978, only about 1,332 spontaneous migrant families are left within the area (Haji Bakar et al., 1980).

Spontaneous rural-rural migrants from the state of Kedah were originally from the districts of Kubang Pasu, Kota Setar, Pendang, and Yan, all are within the Muda rice bowl area, with a few from the districts of Padang Terap, Sik, and Bandar Bahru. This study only focus on only those migrant peasant producers from the district of Yan. Since the introduction of the green revolution in 1970, there was a somewhat poor economic performance by the majority of farm households in Yan, when compared to the other districts within the Muda area (Gibbons, 1984).

In addition, when comparing the total farm acreage to the other districts in the Muda area, Yan was the smallest. This provided an advantage in the sampling of non-migrants in the study since their villages (as well as the villages of origin of the migrants) were in close proximity to each other. This gave a low variation in overall village characteristics.

Based on the 1978/80 study, and a revisit to the Trans-Perak IADP area in early January 1985, about 200 migrant peasant producers who were

originally from farm households of the Yan district are residing and cultivating rice within the area. A random sample of 100 heads of households was secured for the study.

During the revisit, a list of the villages of origin of the migrant peasant producers was prepared. These villages were important for selecting the non-migrant respondents as another sample. For instance, if four migrants were originally from village A, then, if not all four non-migrant respondents were selected from this village, at least one should be included. As the village boundary can be very arbitrary, villagers living close to these boundaries may claim that they are from either villages or from anyone of them.

Since the study is interested in finding the different perception of social integration and other attitudinal views about village activities, it is assumed that having the non-migrant counterparts from the actual villages of origin of the migrants are very relevant for the comparative purposes. As a result, within each village of origin, an almost equal number of non-migrant respondents as compared to the migrants were selected.

The main criteria used to select the non-migrant respondents were their awareness of the activity of the migration process, and the approximate year the actual migration took place. In this way, the sample of non-migrants was not based on a simple random sample. There was a notion that the priority in selecting the non-migrant respondents be given to those who actually knew the migrants while they were living in the villages identified. Those villagers who knew the

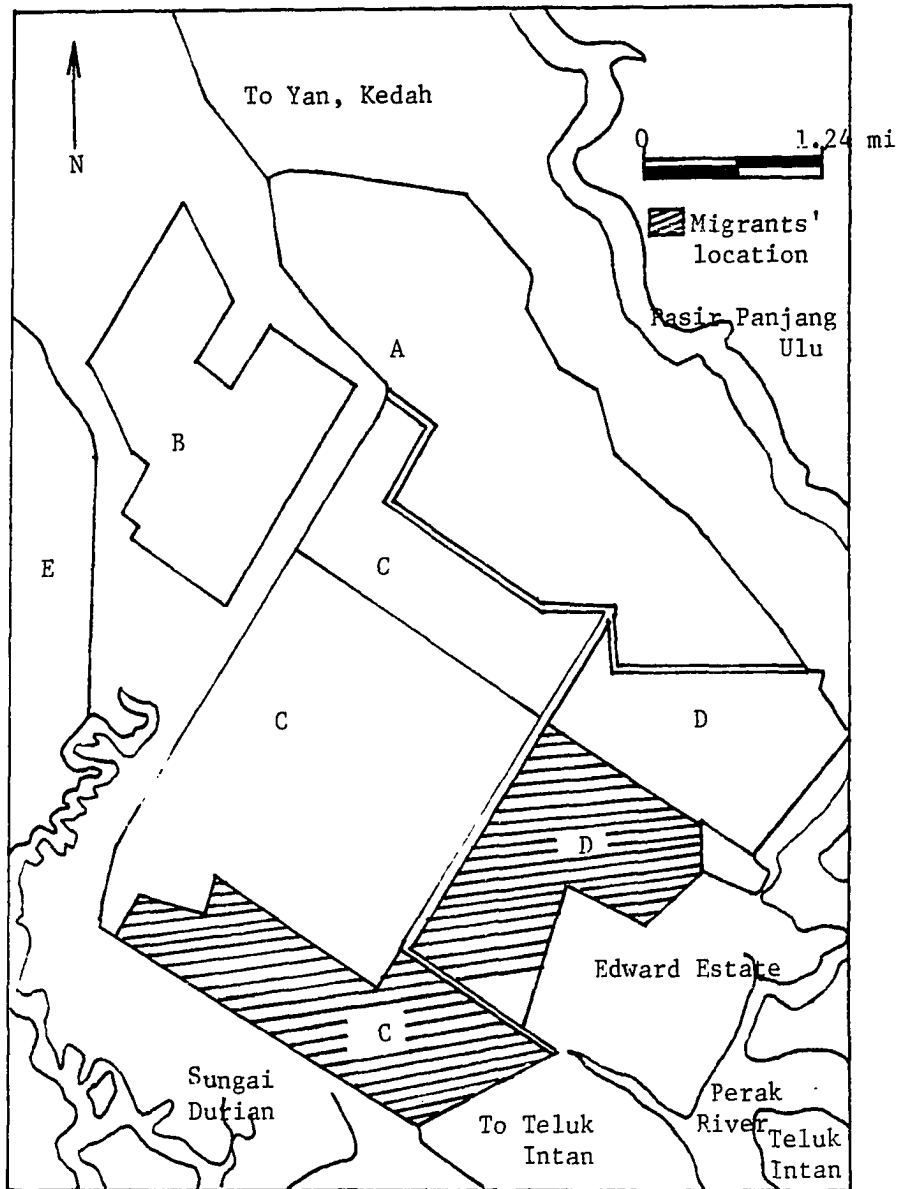
migrants were immediately interviewed. While such a priority is not a must, there is the fact that the sample of non-migrants is not random, and is dependent to some extent on the sample of migrants.

However, an instruction was also given to the enumerators that if they could not identify villagers who knew the migrants from any particular village, they were required to interview an equal number of non-migrant respondents from that village compared to the number of migrants who were originally from the village concerned.

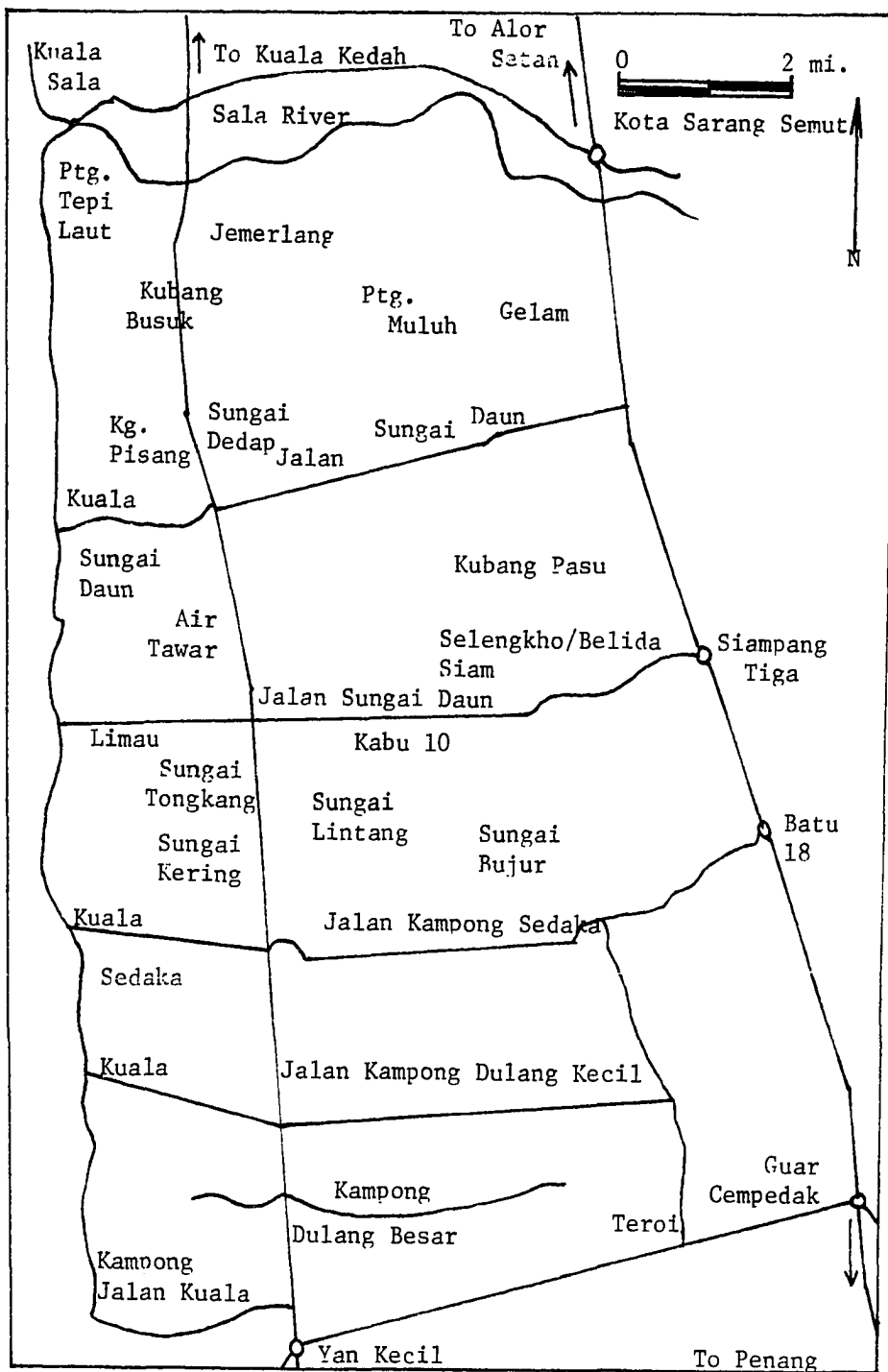
Map 4 shows the location of the area of destination of the migrant respondents of the study. Area A is the earliest area to be opened by spontaneous rural-rural migrants originating from the state of Perak. Area B is the initial area where spontaneous rural-rural migrants from the state of Kedah migrated before the eviction exercise. Part of area C is now occupied by the fully organized youth and ex-serviceman settlers. The shaded areas of C and D are the actual locations of the spontaneous rural-rural migrants new residential area. The migrant respondents were sampled out from this area, particularly in the shaded part of D.

Map 5 presents the locations of the villages of origin of the migrant peasant producers. They are also the villages of the non-migrant respondents used in the study. Table 2 provides the number of non-migrant respondents from the villages selected. The distance from the district of Yan to the Trans-Perak IADP area is about 150 miles by the main road.

The interviewing exercise for the study was conducted under the



Map 4. TransPerak IADP area with special reference to the location of the migrant-respondents (A= Location of spontaneous migrants who already earned proprietary right. B = Location of organized migrants under the auspices of FELCRA. Unshaded C = Location of ex-servicemen settlers resettled by FELCRA. Shaded C, D, and unshaded D = Locations of spontaneous migrants from out-of-state)



Map 5. Locations of the villages of origin of the non-migrant-respondents within the district of Yan, Kedah

Table 2. Distribution of villages of origin and the number of the non-migrant-respondents selected for the study

For locations surrounding:									
Sungai Limau and Sungai Daun		Dulang and Sungai Yan		Sedaka		Sungai Kering and Sungai Tongkang		Sungai Dedap and Gelam	
Village	No.	Village	No.	Village	No.	Village	No.	Village	No.
Sungai Daun	5	Dulang	4	Kuala	4	Sungai Bujur	3	Gelam	4
Air Tawar	2	Tengah	3	Tengah	2	Sungai Lintang	4	Jemerlang/ Permatang Buluh	4
Sungai Limau	4	Ulu	2	Ulu	3	Sungai Kering	4	Tepi Laut/ Kubang Busuk	4
Sungai Daun Tengah	3	Dulang Besar	3			Sungai Tongkang	4	Sungai Dedap	4
Sungai Daun Ulu	3	Kuala Dulang Besar	4					Pisang	4
Jalan Kuala Sungai Limau	4	Sungai Yan/Jalan Kuala	4						
Sungai Limau Tengah	3								
Kabu 10	4								
Selengkoh/ Belida Siam	5								
Kubang Pasu	3								
Total	36		20		9		15		20

auspices of the Center for Policy Research (CPR) of Universiti Sains Malaysia, which had taken care of matters pertinent to the "human subject" aspect for the study. A letter regarding this matter is attached in the Appendix. Two research technicians from the Center provided full-time aid in the preparation of the interview schedule, pre-testing the schedule, training of three field enumerators, and the actual interviewing.

The field work covered a period of three months beginning with the sample selection and the listing of the villages of origin of the migrant peasant producers in Trans-Perak. The actual interview was conducted during the months of February and March of 1985. Since some time was required to prepare the list of villages of origin of the migrants, the interview was first conducted in the Trans-Perak area.

Besides including both migrants and non-migrants, both information at T_1 (prior to migration) and T_2 (after migration) periods were ascertained from both groups. Specifically, the T_1 period centers around 1970 when the green revolution package program for agricultural development was introduced in the Muda area. The T_2 period is the period during which the interview was conducted, that is 1985. The two time periods are very relevant and important, particularly when the performance of both groups were to be comparatively analyzed. The non-migrant group served as a comparative-control population for the study.

The personal interview method was used since other data collection tools, such as telephone interview and mail questionnaires were virtually impossible for both areas do not have an advanced

communication infrastructure.

Yan District of the Muda Area, Kedah

Vivid descriptions of the Muda area can be found in the writings of Afifuddin Haji Omar (1978), Kuchiba et al. (1979), and Bell et al. (1982). The area covers about 95,000 hectares (237,000 acres) of prime rice farmland (Bell et al., 1982). It stretches from the foot of Mount Jerai from within the interior of the Malaysian Peninsula out toward most of the western seaboard of the states of Kedah and Perlis. Map 3 demarcates the physical boundaries of the Muda area within the Peninsular or West Malaysia.

The width of the region marked on the map is about 20 kilometers (12 miles), and its length, which stretches from the central coastline of Perlis to the southernmost town of the region (Gua Tempedak), is about 80 kilometers (50 miles). The area was developed as early as the 18th century (Horrii, 1981) where during those days, it was reported that the region was the main supplier of rice to the Straits Settlements of Penang and Malacca.

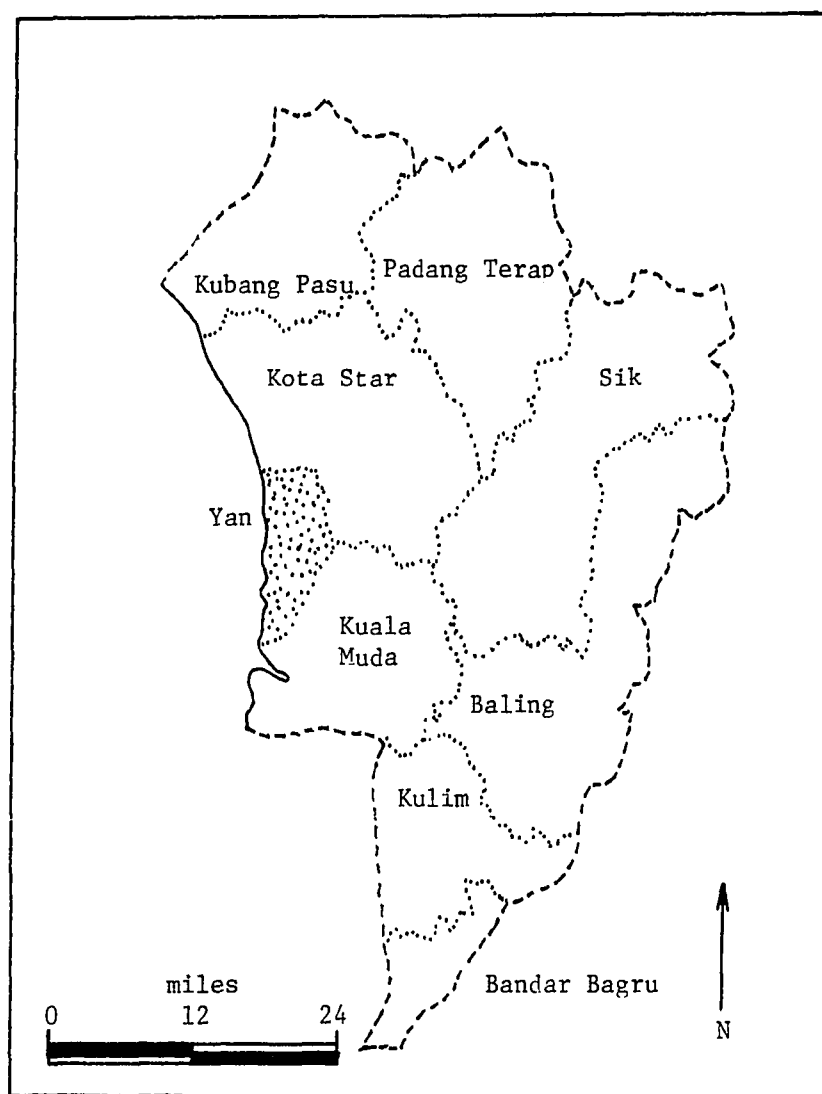
With the introduction of new technology of the green revolution, many think that the main objective of redistributing increased productivity among all rice farming households has not been successfully met (Shari and Sundaram, 1982; Scott, 1983; Shukur Kassim et al., 1984a; Gibbons, 1984). Poverty is still rampant among the rice peasant producers.

The area actually supports about 340,000 people (MADA, 1980). Rice is the only crop cultivated. By 1974, 92 percent of the total farm area

in the region achieved double-cropping of rice per year. The district of Yan is the smallest of all the Muda districts from within the state of Kedah. Map 6 shows the size and locations of various administrative districts of the state of Kedah. Both the districts of Yan and Bandar Bahru form the smaller districts, with bandar bahru having a slight edge over Yan.

According to the 1970 population census, a total of 34,012 persons lived in Yan district (Malaysia, 1971a). The 1980 population census gives the 1970-80 growth rate among the Malay population of West Malaysia at 2.7 (Das, 1983). Since about 70 percent of the Malay population reside in the rural areas (Malaysia, 1984) by 1980, the population of the district could almost have doubled that of the 1970 population. However, in a recent rural poverty study, which involved farm households from this district, a total of 10,279 households were reported to reside in Yan (Gibbons, 1984). With an average of 5 persons per household (Malaysia, 1981:75) for the Malay population in 1980, the total district population as of 1982 could be around 51,395 people. The Malays make up almost 95 percent of the total population of Yan.

Although rice is the main crop cultivated in the Muda area, and rice farming is the main occupation of the people here, some rice cultivators in Yan - particularly those close to the coastal area - are also involved in fishing. Therefore, when fishing is the main occupation, rice cultivation is the part-time occupation and vice versa, for the coastal people. The distribution and location of villages within the district on Map 5 may help divide the coastal and interior



Map 6. Administrative districts of the State of Kedah
(Source: Bailey, 1975, p. vii)

regions. Villages to the left of the Yan Kecil-Kuala Kedah road are within the coastal region.

Trans-Perak IADP Area

The Trans-Perak or Seberang Perak region is located in the southern part of the state of Perak, separated by an established rice irrigation scheme of Sungai Manik by the Perak River. Map 3 shows the general location of this region.

The 1978/80 socio-economic study (Haji Bakar et al., 1980), discovered that the initial rice cultivation area was 4,800 hectares (12,000 acres). By 1979, an additional 13,472 hectares (33,000 acres) of adjoining swamp land had been taken over by the state government to be developed by FELCRA. This additional land area is to be planted with oil palm and cocoa, since rice has already covered the initial 4,800 hectares.

The number of households residing in the area was 3,000 in 1979. However, this figure is inflated because uses lists included names provided by the sub-district office of Kampong Gajah before the actual eviction took place in 1977/78. The breakdown of the farm households within the study area after the eviction exercise is shown in Table 3.

As Map 4 illustrates the residential locations of various peasant producers in the area are somewhat segregated. For example, the organized and fully sponsored migrants reside within the village settlement area by the roadside sandwiched between B and C blocks. A small township area is organized there. The earliest spontaneous migrants who attained proprietary rights to land area in block A through

Table 3. Distribution of farm households before the eviction exercise according to blocks, Trans-Perak, 1979 (Source: Haji Baker et al. (1980) p. 126)

Block	Types of Migrants	Number of Households	Percentage	Acreage
A	Spontaneous	280	15.5	948.6 ha.
B	Organized	261	14.5	719.0 ha.
C	Organized	211	11.7	878.5 ha.
C	Spontaneous	290	16.1	976.2 ha.
D.	Spontaneous	762	42.2	1,365.6 ha.
Total		1,804	100.0	4,887.9 ha.

a fringe alienation process by the state government, reside all over the block. And the other spontaneous migrants reside all over C and D blocks.

Very seldom do members of these different migrant groups meet or exchange community activities. Among them, however, community activities are conducted with cohesion and harmony. Fortuitous relationships may be initiated when they meet in the town of Teluk Intan or while crossing the Perak River to Teluk Intan by ferry.

This rice growing area is also covered by a complex network of drainage and irrigation canals constructed during the time of the Second Malaysia Plan period of 1971-75. It is along these drainage and

irrigation canals that the spontaneous migrants in A, C, and D blocks settled. The area is projected to be another productive rice growing area in the Peninsula (Haji Bakar et al., 1980). With two export crops (oil palm and cocoa) added, it is hoped that peasant-producer communities in the area will gain extra income apart from rice farming.

Operationalization of Variables

Various factors influence social integration among members of a given community. Social factors include education, roles, and social ties to the community; economic factors include land tenure status, types of occupation, and employment status; demographic factors include age, dependent children, and marital status; and political factors include the commitment one has to a popular political party in the community, and personal participation in party politics.

Within a given community, different factors may be differentially associated with social integration because the situational atmosphere within which the community exists may impinge on these factors. While few have a highly significant association with perceived social integration in the community, other factors may either have an insignificant or negatively significant associations. Unpredictable events such as flood, famine, war, or an outbreak of certain diseases may result in some factors having various levels of significance to social integration.

Dependent Variables

Four dependent variables were selected for the model in the study. They are social integration (Y_1), political participation (Y_2), access to development accelerators (Y_3), and poverty status (Y_4).

Social integration is measured by the respondents' perception of their integration into the community. The Likert scale items were used to elicit their perception of social integration. After considering the reliability and precision of measurement for all items, six items were selected. The reliability coefficient is 0.5588.

In addition political participation and access to development accelerators were measured by the respondents' perception of their participation and access. Again, after the reliability of the items, three statements were used to elicit the respondents' perception of their political participation ($\text{Alpha} = 0.6082$) and access to development accelerators ($\text{Alpha} = 0.6902$). The same five-point Likert scale was used.

Poverty was measured by the proportion of the respondents' per capita per month poverty line income. The respondents' net income includes income received by their spouses and whatever remittances they may receive from their working children, if any. As of 1970, the official per capita per month poverty line income was Malaysian \$28.00 (US\$11.20 as US\$1.00 equals to Malaysian \$2.50 in 1970). For 1985, the official per capita per month poverty line income was Malaysia \$60.00 (US\$25.00 as US\$1.00 equals to Malaysian \$2.40 in 1982). The official poverty line income for 1982 (Gibbons, 1984) was used because an updated

threshold for 1985 had not been formulated at the time of the interview.

Independent Variables

Eight independent variables were selected for the study. They are age (X_1), education (X_2), dependent children (X_3), total family member (X_4), perceived kin closeness (X_5), farm size (X_6), land tenure status (X_7), farm employment status (X_8), and political commitment (X_9).

Age was measured by the actual age of the respondent on his last birthday. Verification of age was checked on the respondent's identity card. Education was measured in three categories: never been to school (0 year), completed primary school (6 years), and completed lower secondary school (9 years). This measure was influenced by the findings of the 1978/80 study that the majority of the migrants had either never been to school or had just completed six years of primary education.

Dependent children is the total number of children under the direct care of the head of household who were the respondents for the study. For the total number of family members, the respondents were asked how many households in their villages or nearby, have kinship ties to them. Their numerical response to the question provided the total family members that they had in their community. Kinship closeness was elicited by asking the respondents to respond to various pertinent statements. Again, after taking the reliability ($\text{Alpha} = 0.6890$) of the items and the measurement error into consideration, three items or statements were used to elicit this perception. These statements are listed in Appendix A.

Farm size was measured using the actual size of farms in hectares,

and the land tenure status was measured by the respondents operational status on the piece or pieces of land they were operating. Land tenure also reflected whether or not the respondents owned any piece of rice farmland within their communal location. Thus, three categories of measure for land tenure were used. An owner-operator is a person who operates his own land. An owner-tenant describes a person who, besides operating his own piece of land, also rented land from others. A tenant-operator is a person who owns no land at all. Agricultural laborers were also included under this category.

The farm employment status was measured in terms of full-time, part-time, or unemployed categories. Full-time employment refers to a person who concentrates only on rice cultivation as his main occupation, while part-time rice cultivators have other occupations, such as fishing, petty business, carpentry, or taxi driver. Finally, political commitment was measured in terms of whether the respondents belonged to any political party or not. Those who were committed belonged to a political party, and those uncommitted were non-party members.

Hypotheses

The objective of the study and the questions that it attempts to answer lead to the formulation of the following main and sub-hypotheses.

The main hypothesis

This study advances that the migrants are less socially integrated in their community of origin than the non-migrants are.

Sub-hypotheses

The theoretical framework presented in Chapter 4 paves the way for the formulation of the following sub-hypotheses:

- 1) Migrants perceived access to development accelerators differs significantly from that of the non-migrants. This perception is related to perceived social integration in the community of origin.
- 2) Migrants perceived active political participation in local politics differs significantly from that of the non-migrants, and their perceived political participation is related to the perceived social integration in the community of origin.
- 3) Migrants poverty status differs significantly from that of the non-migrants, and such a status is related to perceived social integration in their community of origin.
- 4) Migrants and non-migrants ages do not differ significantly, and their ages are related to perceived social integration, political participation, and access to development accelerators. Their ages do not have a significant relationship to poverty status.
- 5) Migrants and non-migrants levels of educational attainment do not differ significantly, and these levels are related to perceived social integration, political participation, access to development accelerators, and to their poverty status.
- 6) Migrants and non-migrants total number of dependent children differs significantly, and this number is related to their

perceived social integration, political participation, access to development accelerators, and to their poverty status.

- 7) Migrants and non-migrants perceived kinship closeness differs significantly, and this perception is related to their perceived social integration, political participation, access to development accelerators, and their poverty status.
- 8) Migrants and non-migrants farm size operated differs significantly, and this factor is related to their perceived social integration, political participation, access to development accelerators, and to their poverty status.
- 9) Migrants and non-migrants land tenure status differs significantly, and land tenure status is related to their perceived social integration, political participation, access to development accelerators, and to their poverty status.
- 10) Migrants and non-migrants farm employment status differs significantly, and is related to their perceived social integration, political participation, access to development accelerators, and to their poverty status.
- 11) Migrants and non-migrants political commitment differs significantly, and is related to their perceived social integration, political participation, access to development accelerators, and to their poverty status.

Discriminant Analysis

Discriminant analysis, according to Pedhazur (1982), was first developed by Fisher (1936) to classify objects into one of the two distinctly defined groups. It is a combination of the independent, or predictor, variables which form and serve as the basis of this classification (Norusis, 1985).

According to Kachigan (1982), the criterion variable can have a minimum of two values. As an example, values can be voters versus non-voters, smokers versus non-smokers, or migrants versus non-migrants. Likewise this procedure can also be applied to the criterion variables with more than two values. It includes values such as Protestant, Catholic, or Methodist; Democrat, Republican, or Independent; or users of Toyota, Honda, Camaro, or Ford. The criterion variable does, in fact, represent the dependent variable in the study.

Discriminant analysis has two basic assumptions: it is assumed that the variance of a predictor variables are the same in the respective populations from which the groups of objects have been drawn (Kachigan, 1982). The correlation between any two predictor variables is the same in the respective populations from which the alternative criterion groups are sampled. A number of concepts and statistics are pertinent in employing discriminant analysis as a tool to differentiate the characteristics of the groups.

One of the concepts is the discriminant function. This concept is analogous to regression analysis, where a weighted combination of the predictor variable values are used to classify an object into the

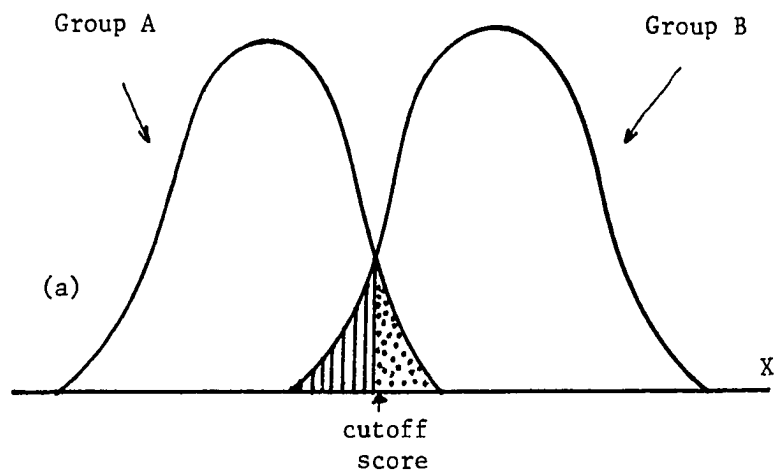
appropriate criterion variable groups (Kachigan, 1982). Norusis (1985) maintains that a good discriminant function is one that has much between groups variability when compared to within group variability.

The equation to calculate the discriminant function is also similar to that of the regression equation. For example, take L to represent the discriminant function, then

$$L = b_1X_1 + b_2X_2 + \dots + b_kX_k$$

where X_1, X_2, \dots, X_k represent values on the various predictor variables and b_1, b_2, \dots, b_k are the weights associated with each of the predictor variables, and L is an object's resultant discriminant score. The standardized b is similar to the beta coefficient in the multiple regression (Pedhazur, 1982), and a 0.05 level of significance is used.

To divide the two groups from each other, the concept of cutoff score is used (Kachigan, 1982; Norusis, 1985). Kachigan (1982) suggests that of the infinite number of possible cutoff scores along the predictor variables, the best outcome for the analysis is to choose the one that results in the fewest errors of classification. Figure 4 illustrates this. With groups of equal size and equal variance, the best cutoff score is located midway between the means of the two groups. The overlapping areas which are indicated by the dotted and striped sections of the bell-shaped diagram indicate the intensity of errors of misclassification. When there is no overlap between the criterion groups with respect to the predictor variable, then there is virtually no error



- ▨ Group A members misclassified as Group B members
- ▩ Group B members misclassified as Group A members

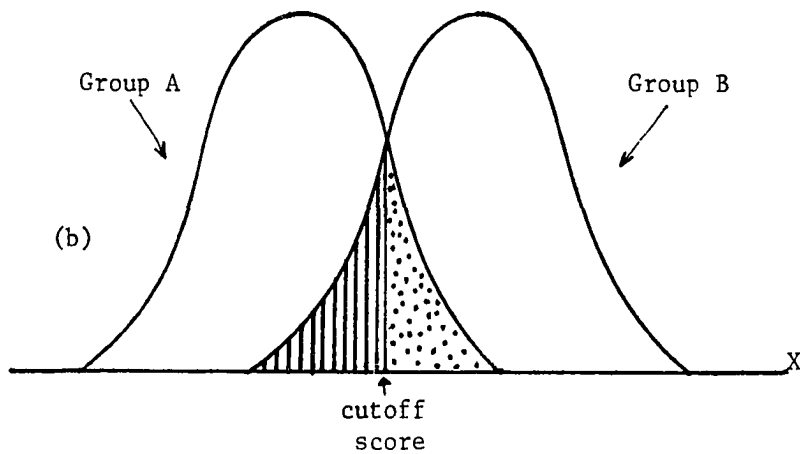


Figure 4. Errors of classification when there is (a) large versus (b) small group difference, for the one-predictor-variable situation

of misclassification.

In discriminant analysis, the interpretation of the standardized b or beta coefficient is analogous to multiple regression, that is, it acts as a contributing coefficient explaining how much the predictor or independent variable influences or contributes to the criterion or dependent variable. It is within this scope of similarity that Kachigan (1982:234) argues that "there are legitimate instances in which discriminant and regression analysis can be applied to the same data," particularly when continuous criterion variables are also included in the measure.

This particular study also intends to apply multiple regression to the data. However, its application is not to determine the contribution of the predictor variables to migration, but instead to identify which are the salient independent variables that contribute to the dependent variables, such as social integration, political participation, access to development accelerators, and poverty status.

CHAPTER 6. RESEARCH FINDINGS

This chapter provides answers to the following questions:

- 1) What are the discriminating characteristics that differentiate the migrants from the non-migrants?
- 2) Are the migrants economically and socially better off at their place of destination when compared with their non-migrant counterparts at their place of origin?
- 3) What are the most salient factors that influence the social integration of rice peasant producers into their village communities?
- 6) Can there be a consistency in the determinants of internal migration, particularly in developing countries?

The other two questions,

- 4) What is the state of agricultural development and the type of structure of agriculture in which the rice peasants operate their farms, and what will the National Agricultural Policy (NAP) promise and assure them?
- 5) What sort of lessons could be learned from such a migration process?

shall not be dealt with in this chapter. Part of question 4 has already been explained in the literature review. The rest of that question and question 5 will be discussed in the implication section of Chapter 8.

Various tables, which include the overall characteristics of both migrants and non-migrants for the two time periods, will be presented in Appendix B.

Migrant and Non-migrant Characteristics

Perceived social integration

Six statements were used to ascertain perceived social integration of rice peasant producers in the study. They are listed in Appendix A.

From Table 4, the average score of perceived social integration for the migrant group was 23.08 compared with 24.65 for the non-migrant group. Figures in parentheses indicate those scores for the T_2 (after migration) period. From these figures, the study revealed that the migrants were less socially integrated into their community of origin when compared with their non-migrant counterparts.

Perceived political participation

Perceived political participation was measured by using three statements as listed in Appendix A. The perceived political participation among members of the rice peasant producers community of Yan district was based on how active they were in local political activities. Table 4 shows that the mean score for the migrants was 10.86 compared with 11.17 for their non-migrant counterparts. The non-migrants, therefore, perceived themselves to be slightly more active in political participation when compared with the migrants.

Perceived access to development accelerators

The variable used three statements to arrive at a composite score of perceived access to development accelerators within the village community in Yan district. These statements are listed in Appendix A. Among the migrants, the mean score was 11.51 compared with 8.54 for the non-migrants. It was very surprising to observe that the migrants perceived a better access to development accelerators when compared with their non-migrant counterparts.

Table 4. Descriptive statistics from the migrants' and non-migrants' characteristics before and after the migration process

Characteristics	Migrants			Non-Migrants		
	Mean	Variance	Std. Deviation	Mean	Variance	Std. Deviation
Perceived social intergration (Y_1)	23.08 (24.67) ^a	5.73 (5.60)	2.39 (2.37)	24.65 (24.60)	2.29 (2.71)	1.51 (1.65)
Perceived political participation (Y_2)	10.86 (11.62)	2.51 (2.24)	1.58 (1.50)	11.17 (10.82)	4.10 (5.28)	2.03 (2.30)
Perceived access to development accelerators (Y_3)	11.51 (13.58)	2.21 (2.17)	1.45 (1.47)	8.54 (13.10)	3.71 (1.47)	1.93 (1.21)
Poverty status (Y_4)	0.75 (0.76)	0.27 (0.07)	0.52 (0.27)	1.28 (0.85)	0.66 (0.42)	0.81 (0.65)
Educational levels of attainment (X_1)	3.48	9.95	3.15	4.14	8.32	2.90
Age (X_2)	30.82 (43.95)	122.70 (113.60)	11.08 (10.66)	39.41 (54.50)	86.18 (93.47)	9.28 (9.67)
Dependent children (X_3)	3.06 (4.36)	7.17 (4.82)	2.68 (2.20)	4.18 (3.62)	5.22 (4.97)	2.29 (2.23)
Total family (X_4)	5.51 (2.73)	7.97 (4.28)	2.82 (2.07)	4.66 (4.10)	5.36 (6.15)	2.32 (2.48)

^aFigures in parentheses are for the period after the migration process.

Table 4. (continued)

Characteristics	Migrants			Non-Migrants		
	Mean	Variance	Std. Deviation	Mean	Variance	Std. Deviation
Perceived kinship closeness (X_5)	9.93 (9.50)	3.52 (3.93)	1.88 (1.98)	13.24 (13.28)	1.34 (1.30)	1.16 (1.14)
Farm size operated (X_6)	1.04 (1.76)	1.65 (0.29)	1.29 (0.54)	1.84 (1.74)	1.79 (1.76)	1.34 (1.33)
Land tenure status (X_7)	2.67 (3)	0.41 (0)	0.64 (0)	2.98 (2.98)	0.04 (0.04)	0.20 (0.20)
Farm employment status (X_8)	1.53 (1.50)	0.33 (0.29)	0.58 (0.54)	1.29 (1.22)	0.23 (0.21)	0.48 (0.46)
Political commitment (X_9)						

Poverty status

Poverty was measured as the per capita per month net income of the peasant households. Its proportion to the official poverty line income for the whole country was used as a comparative yardstick. The proportion of less than 1.0 indicates that a household, or individual head of a household's income, is below the poverty line income. Hence, the family is living in poverty. A proportion of more than 1.0 indicates that an individual household is not poor.

As Table 4 indicates, the per capita per month income for the migrants was 0.75 compared with 1.28 for their non-migrant counterparts. The frequency distribution of poverty status among migrants and non-migrants is presented in Table 5a in Appendix B. For both groups, those with a proportion equal to or less than 0.50 were considered very poor. As such, 46.0 percent of the migrants were very poor compared with about 11.0 percent of the non-migrants. For those who lived above the poverty income line, 59 percent were non-migrants, while only 27 percent were in the migrant group. Undoubtedly, the migrants were poorer than the non-migrants.

Educational levels of attainment

As Table 4 indicates, the average level of educational attainment among the migrants was 3.48. This, however, is not the actual average because education was categorically measured. Since completion of primary education in the country takes six years, or nine years to complete lower secondary school, the majority of the migrants have no opportunity to continue with secondary education. The same can be said

for the non-migrants. Their level of educational attainment averaged slightly higher than the migrants', that is, 4.14. Among the migrants, 44 percent had never been to school, 52 percent completed primary school, and 4 percent completed the lower secondary school. Among the non-migrants, the percentages were 32 percent, 66 percent, and two percent, respectively.

Age

The average age of the migrants was found to be about 31 years. Compared to their non-migrant counterparts, whose average age was slightly more than 39 years, the migrants cannot be considered very young.

The frequency distribution for ages of migrants and the non-migrants is illustrated in Table 2a in Appendix B. From this table, it was found that 35 percent of the migrants were between the ages of 20 and 29 years, while most non-migrants were between the ages of 30 and 39 years (48%). Thus, age, as a determinant of migration for the study, differed quite distinctly at the level of less than or equal to 19 years. At this level, 16 percent of the migrants fell under this category, while for the non-migrants, only 2 percent belonged in this category.

Dependent children

Dependent children in the study referred to the respondents' children who are not married or employed because they are in school or not yet ready to join the labor force. The average number of dependent

children for the migrants was just less than three, while for the non-migrants it was about four. Although the difference in the average number of dependent children between the two groups was only one, quite a number of migrants (29%) had no children, compared with only 2 percent of the non-migrants.

Total family

This variable refers to the number of households within the same village, or close by, which had kinship ties with the respondent household. Among the migrants, the average number of families was 5.51, and for the non-migrants, the number was 4.66 families (Table 4). The migrants, therefore, had a slight edge over their non-migrant counterparts.

Perceived kinship closeness

Three statements were used to ascertain the respondents' perceived kinship closeness. The statements are listed in Appendix A. Based on the five-point Likert scale, the scores could range from a minimum of three points to a maximum of 15 points. Among the migrants, the average score was 9.93, while for the non-migrants, the average score was 13.24 points. Thus, on average, non-migrants reported a closer relationship with their kin than the migrants.

Farm size operated

The farm size operated differed quite distinctly between the migrants and the non-migrants. Among the migrants, the average size of farm operated was found to be 1.04 hectares, compared with 1.84 hectares

for the non-migrants (Table 4).

Table 3a in Appendix B illustrates the situation of farm size. For example, for the migrants, 41 percent operated farm sizes between 0.59 and 1.73 hectares, while 37 percent of the non-migrants operated farms in this same range. However, 23 percent of the migrants operated no farm, compared with none of the non-migrants. Conversely, for farm sizes that ranged from 2.31 to more than 2.88 hectares, only 9 percent of the migrants operated that size, while the non-migrant group had 35 percent of its total operated farms within this range. The non-migrants, therefore, operated larger farms than the migrants.

Land tenure status

Three categories of land tenure status were used: owner-operator, owner-tenant and tenant-operator. As seen in Table 4, both migrants and non-migrants fell within the same category of land tenure status, that is, tenant-operator. However, from Table 1c in Appendix B, the distribution of the land tenure status was more explicit because it provided the actual percentages of the three categories of tenure status, as well as those who only worked as agricultural laborers.

Among the migrants, the majority (59%) were owner-tenants, while the owner-operator category represented only 14 percent. There also was a number (15%) who were only agricultural laborers. Three tenant-operators and nine non-farmers completed the 100 total respondents in the migrant group.

On the other hand, the majority of the non-migrants (56%) were tenant-operators and 35% were the owner-operators. While none of the

non-migrants worked as agricultural laborers, eight of them were owner-tenants, and one respondent did not farm before the migration process took place.

Farm employment status

Table 4 indicates that the migrants' average score was more inclined toward part-time employment status when compared with the non-migrant group, which indicates an inclination toward full-time employment status. Supplementing this information, Table 1c in Appendix B helps to differentiate all cases. Among the non-migrants, the majority (71%) were fully employed, while only 4 percent of the migrant group were fully employed. Most of the migrants (51%) were unemployed, while the rest (45%) were employed part time.

Only 2 percent of the non-migrants were unemployed and 27 percent of those were employed part time. Thus, while Table 4 summarizes the groups' characteristics with respect to this variable, Table 1c in Appendix B illustrates an explicit distribution of the various categories that make up this variable. Again, the non-migrants were found to have a better employment status when compared with the migrant peasant producers.

Political commitment

Political commitment was measured by how committed a peasant producer was to local politics. The category was divided into uncommitted (those who did not join any political parties) and committed (those who either joined the ruling political party or any other party.

From Table 4, the average Likert score for the migrants indicates that they were inclined toward the uncommitted group, while their non-migrant counterparts were inclined toward the committed group. It is clear that the migrant peasant producers were those who tended to free themselves from any political commitment in their community of origin. In Table 1c of Appendix B, 91 percent of the migrants were politically uncommitted, while among their non-migrant counterparts, 87 percent were politically committed to the existing local political parties in their community of origin.

Discriminant Analysis

Univariate analysis

In the univariate analysis of variance, migrants and non-migrants were compared on each of the predictor variables. The use of the F-ratio helped to determine such a status among the predictor variables.

Table 5 illustrates the F-ratio and the significant levels for the 13 predictor variables selected. An F-ratio is actually the ratio of the between-group sums of squares to the total sums of squares. The bigger the F-ratio, the greater the difference between the two objects or events to be identified.

Table 5 also provides the mean score for each predictor variable for both the migrant and the non-migrant groups. In this way, the comparison of the two groups also can be illustrated based on the means of these predictor variables. Where the difference between the means for the two groups is small, the F-ratio also will be very small,

Table 5. Univariate F-ratio with 1 and 198 degrees of freedom

Variable	Means		F	Significance (P<)
	Migrant	Non-Migrant		
Perceived social integration (Y_1)	23.08	24.65	30.730	0.0000
Perceived political participation (Y_2)	10.86	11.17	1.454	0.2293
Perceived access to development accelerators (Y_3)	11.51	8.54	149.100	0.0000
Poverty status (Y_4)	0.75	1.28	30.460	0.0000
Educational levels of attainment (X_1)	3.48	4.14	3.072	0.0812
Age (X_2)	30.82	39.41	35.330	0.0000
Dependent children (X_3)	3.06	4.18	10.130	0.0017
Total number of families (X_4)	5.51	4.66	5.421	0.0209
Perceived kinship closeness (X_5)	9.93	13.24	225.600	0.0000
Farm size operated (X_6)	1.04	1.84	18.340	0.0000
Land tenure status (X_7)	2.67	2.98	21.590	0.0000
Farm employment status (X_8)	1.53	1.29	28.850	0.0000
Political commitment (X_9)	1.930	1.20	234.400	0.0000

indicating that the two groups do not differ very significantly.

The study will consider only the significance level of 0.05. Variables that do not meet this minimum limitation will be considered as non-significant determinants of migration. It is imperative for such a decision to be made because this study is interested in identifying those predictor variables that do not differ very significantly between

the two groups. If they are the same, then they cannot be identified as useful determinants of internal migration, particularly in the Malaysian case.

As Table 5 illustrates, two predictor variables, perceived political participation (Y_2) and educational levels of attainment (X_1) were not significant at the 0.05 level. They were considered not useful as migration determinants. Total family (X_4), as a variable, had a significance level of 0.02, while the rest of the variables were all significant at the 0.01 level.

Perceived social integration was one of the variables that differentiate the two groups significantly, and thus the main hypothesis that social integration is inversely related to migration behavior is significantly supported. For the perceived access to development accelerators (Y_3), an F-ratio of 149.100 significantly supported the hypothesis that both the migrants and the non-migrants differ very significantly with regard to this variable.

Poverty status (Y_4) also differed significantly between the migrants and the non-migrants at the 0.01 level. It, therefore, concurred with the hypothesis that was stated earlier. As far as the educational levels of attainment (X_1) between the two groups was concerned, the study did not show a significant difference. This finding actually was expected, because in previous studies, particularly in West Malaysia, the educational levels of attainment among the rural-rural migrants was not a significant determinant of internal migration.

Migrants and non-migrants did not perceive their active political

participation (Y_2) differently. The variable appeared to have the smallest F-ratio, and therefore, the hypothesis was not supported. On the contrary, political commitment (X_9) between the two groups differed very significantly at the 0.01 level of significance. This relationship supported the hypothesis stated earlier.

The ages (X_2) of the two groups of rice peasant producers differed significantly as hypothesized at the 0.01 level of significance. Similarly, the number of dependent children (X_3) between the two groups was also different, as expected (the F-ratio is equal to 10.130). The study supported the hypothesis that the number of dependent children for the migrants and the non-migrants differed very significantly.

For the total number of families (X_4), the F-ratio was found to be one of the smallest in the study (5.421). Despite such a ratio, the variable had significantly differentiated between the migrant and the non-migrant groups. On the other hand, perceived kinship closeness (X_5) was found to have the second largest F-ratio (225.600), which indicated that both the migrants and the non-migrants differed very significantly on the basis of this particular predictor variable.

The rest of the variables, namely farm size operated (X_6), land tenure status (X_7), and farm employment status (X_8), were found to be significantly different between the migrants and the non-migrants. It is, therefore, appropriate to state that all hypotheses regarding these predictor variables between the two groups were significantly supported. In summary, from the univariate analysis, only 11 out of 13 predictor variables were found to be different between the migrant and the non-

migrant groups.

Multivariate analysis

In the univariate analysis, the F-Tests did not take into account the fact that explanatory variables are correlated. Table 6 in Appendix B illustrates the pooled within-groups correlation matrix for the explanatory variables. Putting all the predictor variables into a single multivariate analysis, the chi-square value of 378.98 confirms that the two groups of migrants and non-migrants differed very significantly with respect to the explanatory variables.

On the other hand, Table 6 displays both the unstandardized and the standardized discriminant coefficients for the 13 predictor variables. The coefficients can be interpreted analogously to multiple regression. With the standardized discriminant coefficients for the two groups, political commitment (X_9), perceived access to development accelerators (Y_3), perceived kinship closeness (X_5), perceived social integration (Y_1), perceived political participation (Y_2), and poverty status (Y_4) were among the most predictive factors differentiating between the two groups of migrants and non-migrants. They contributed to the evaluation of the internal and surrounding external factors that lead to the migration decision-making process. The perceptions of social integration (Y_1), political participation (Y_2), access to development accelerators (Y_3), and kinship closeness (Y_5) are all discriminating behaviors of the migrant rice peasant producers of West Malaysia. Similar to the univariate F-ratios, they differentiate between the two groups while taking into account the existing interdependencies among

Table 6. Standardized and unstandardized discriminant coefficients

Variables	Unstandardized Coefficients	Standardized Coefficients
Perceived social integration (Y_1)	-0.19198	-0.38447
Perceived political participation (Y_2)	0.15677	0.28495
Perceived access to development accelerators (Y_3)	0.39753	0.68378
Poverty status (Y_4)	-0.36466	-0.24806
Educational levels of attainment (X_1)	0.28933	-0.14006
Age (X_2)	-0.00937	-0.09580
Dependent children (X_3)	-0.03585	-0.08923
Total number of families(X_4)	0.07078	0.18272
Perceived kinship closeness (X_5)	-0.42103	-0.65606
Farm size operated (X_6)	-0.01232	-0.01616
Land tenure status (X_7)	-0.27632	-0.13036
Farm employment status (X_8)	-0.11710	-0.07163
Political commitment (X_9)	2.17249	0.73251
(CONSTANT)	2.08320	

them. In this multivariate analysis, perceived political participation (Y_2) was among the most predictive factors for migration behavior, while in the univariate analysis, this variable did not significantly differentiate between the migrant and the non-migrant group.

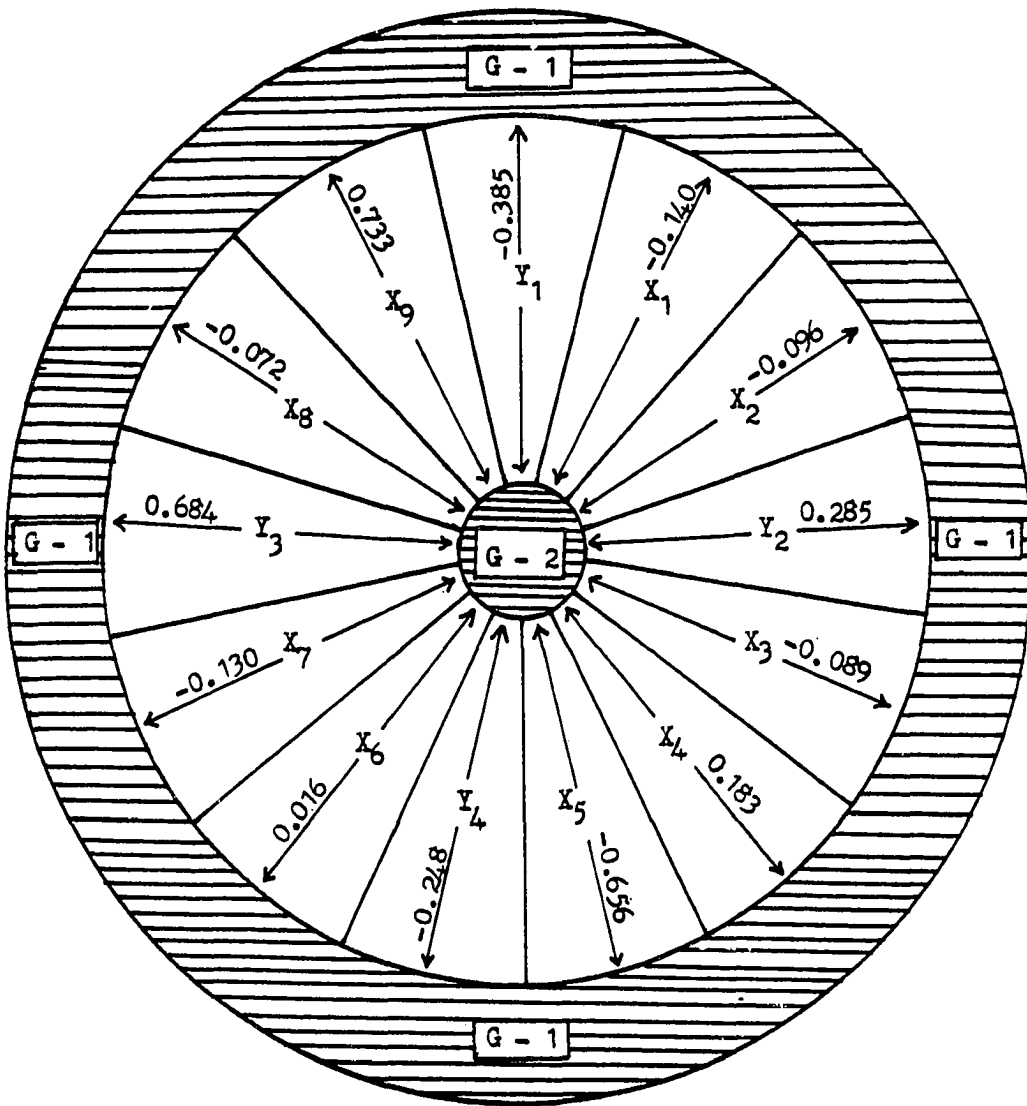
The same situation was observed in the case of educational levels of attainment (X_1). Despite not being a very significant factor

differentiating between the two groups in the univariate analysis, the variable indicated a substantial influence on migration behavior. The standardized coefficient of -0.140 placed the variable within the top eight out of the 13 predictor variables for migration behavior.

The farm size operated (X_6) had the lowest standardized coefficient of -0.016, and this indicated that migration behavior did not rely upon the small farm sizes operated by the migrant rice peasant producers. The rest of the predictor variables, namely farm employment status (X_8), dependent children (X_3), and age (X_2), contributed very insignificantly to the prediction of migration behavior.

Therefore, from the multivariate analysis, we can conclude that the migrants are those who are less educated, younger, have fewer dependent children, smaller farms, and an unfavorable farm employment status (part-time employment). The same can be said about those who perceived themselves to be less close to their kin, less socially integrated into their community of origin, poorer, and who rent rather than own the farmland they operate. While they perceived themselves as having good access to development accelerators and actively participated in local politics, they were the ones who out-migrated, and most were politically uncommitted.

As explained in the model, the difference that existed between the migrant and the non-migrant groups in the model is the unshaded area between the shaded, outer ring (migrants = G1) and the shaded, center circle (non-migrants = G2). The arrows pointing toward each group denotes the discriminating scores between them.



Y_1 = Perceived social integration; Y_2 = Perceived political participation; Y_3 = Perceived access to development accelerators; Y_4 = Poverty status; X_1 = Educational levels of attainment; X_2 = Age; X_3 = Dependent children; X_4 = Total family; X_5 = Perceived kinship closeness; X_6 = Farm size operated; X_7 = Land tenure status; X_8 = Farm employment status; X_9 = Political commitment; G_1 = Migrants; G_2 = non-migrants.

Figure 5. Standardized discriminant coefficients of the variables for the migrant and the non-migrant groups

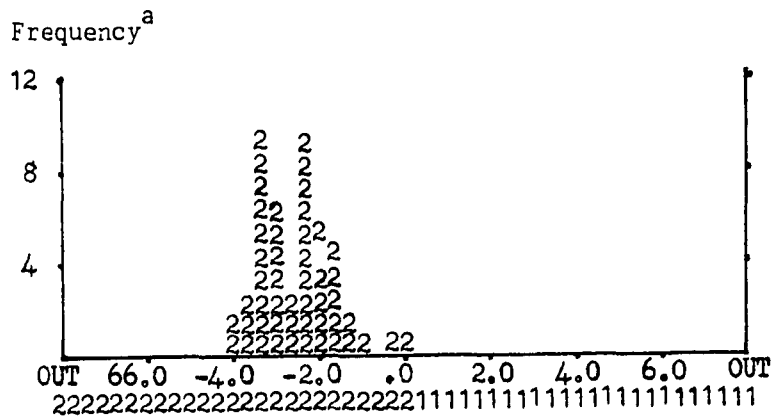
The standardized discriminant function coefficient for each predictor variable is printed on the arrow separating the two groups. Naturally, the arrangement of the predictor variables within the unshaded space will not signify the magnitude of each contributing discriminant function coefficient for the two groups. However, the size of the coefficients is the factor to be recognized as having the most predictive scores differentiating the two groups from each other.

The relationships among each of the predictor variables in the framework, as discussed earlier, is represented by the middle ring. From the Appendix Table 6, higher correlations can be found between farm employment status (X_9) and land tenure status (X_7), between age (X_2) and dependent children (X_3), between poverty status (Y_4) and farm size operation (X_6), between dependent children (X_3) and farm size operation (X_6), and between poverty status (Y_4) and dependent children (X_3).

Finally, Table 7 illustrates the classification results of the multivariate analysis. The percentage of the groups correctly classified is almost 100 percent (99.50%). There was only one case among the migrants which had characteristics similar to those of the non-migrants in the study.

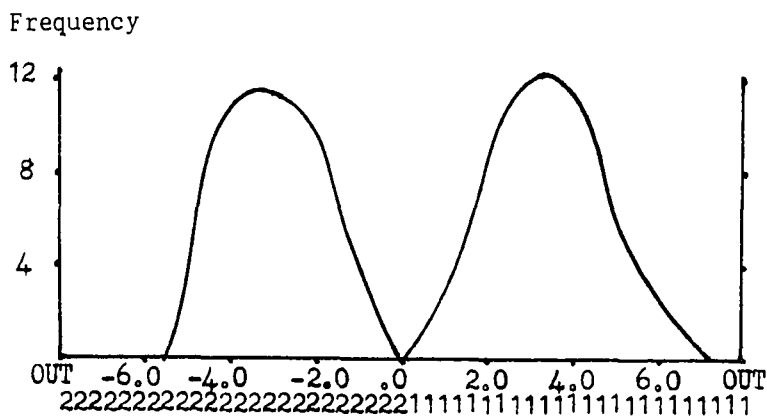
Figure 6a illustrates the histogram of the scores for the migrant group. The illustration indicates a clustering of scores at the middle of the distribution, with the group centroid of 2.48. Figure 6b illustrates the same findings among the non-migrants, and the clustering of scores are shown around their group centroid of -2.48.

From Figure 6c, it can be observed that there is only a very minute



^aFrequency ratio is 1:2 (100 cases for each group).

Figure 6b. Histogram for the non-migrant canonical discriminant function 1



^aFrequency ratio is 1:2 (100 cases for each group)

Figure 6c. All groups distribution curves for the canonical discriminant function 1

overlapping of scores of the two groups of Malay rice peasant producers of the Yan district, West Malaysia. Between the migrant and the non-

migrant groups, it can be concluded that there are significant differences in each, with respect to the explanatory variables selected in the study.

Social integration

Multiple regression analysis was applied to the data to elicit factors that influence migrants' and non-migrants' perceived social integration into their community of origin. The analysis of the two groups was done separately, as revealed earlier, because both groups differed very significantly from each other with regard to the selected predictor variables in the discriminant analysis.

Since the selected nine independent variables in this analysis were treated together for each group, their correlations with each other to identify the strength of association among them is relevant. In addition, the Pearson correlation can be used to verify the hypotheses of the relationships among the independent variables and the dependent variables stated for the study.

Table 8 illustrates the zero-order correlations among the dependent and independent variables selected for the migrant group. The correlation coefficients that are relevant to verify the stated hypotheses are those between the independent variables and perceived social integration (Y_1). From the table, only the perceived political participation (Y_2), perceived access to development accelerators (Y_3), and political commitment (X_9) reflect significant relationships to perceived social integration. Thus, the hypotheses that perceived political participation (Y_2), perceived access to development

accelerators (Y_3), and political commitment (X_9) were significantly related to the perceived social integration for the migrants were supported.

No significant relationships were found between poverty status (Y_4), educational levels of attainment (X_3), age (X_2), dependent children (X_3), total family (X_4), perceived kinship closeness (X_5), farm size operated (X_6), land tenure status (X_7), and farm employment status (X_8) and their perceived social integration (Y_1) into their community of origin. Thus, the hypotheses stated earlier with regard to these relationships were not supported.

In addition to these relationships, the study also revealed that among the migrants, age (X_2) and dependent children (X_3) had a significant negative relationship to their poverty status (Y_4). The correlation for age and poverty status was -0.326 , and the correlation between dependent children and poverty status was -0.477 . Land tenure status (X_7), perceived political participation (X_9), and perceived access to development accelerators (Y_3) had a significant positive correlation to poverty status (Y_4).

Table 9 presents various statistics for the multiple regression analysis of the dependent variables and the independent variables. It is important to note that when perceived social integration (Y_1) is used as a dependent variable, all other variables, including perceived access to development accelerators (Y_3), perceived political participation (Y_2), and poverty status (Y_4), are treated as the independent variables for the analysis. For perceived political participation (Y_2), perceived

Table 8. Zero-order Pearson correlation for the migrant group (N = 100)

	Y ₁	Y ₂	Y ₃	Y ₄	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
Y ₁	1.000												
Y ₂	0.390 ^{**}	1.000											
Y ₃	0.301 ^{**}	0.198 [*]	1.000										
Y ₄	0.092	0.165 [*]	0.306 ^{**}	1.000									
X ₁	0.030	0.036	-0.008	0.028	1.000								
X ₂	0.114	0.202	0.028	-0.326 ^{**}	-0.404 ^{**}	1.000							
X ₃	0.092	0.128	0.122	-0.447 ^{**}	-0.192 [*]	0.669 ^{**}	1.000						
X ₄	0.146	0.231 ^{**}	0.075	0.033	0.233 ^{**}	-0.126	-0.023	1.000					
X ₅	0.073	-0.099	0.132	-0.092	0.053	-0.005	0.007	0.178 [*]	1.000				
X ₆	0.091	0.035	0.295 ^{**}	0.076 ^{**}	-0.049	0.134	0.469 ^{**}	0.039	0.015	1.000			
X ₇	0.097	0.255 ^{**}	0.222 [*]	0.190 [*]	-0.271 ^{**}	0.436 ^{**}	0.391 ^{**}	0.033	0.074	0.621 ^{**}	1.000		
X ₈	-0.054	0.077	0.235 ^{**}	0.100	-0.260 ^{**}	0.439 ^{**}	0.395 ^{**}	-0.111	0.136	0.343 ^{**}	0.639 ^{**}	1.000	
X ₉	0.187 [*]	-0.051	-0.024	0.080	-0.117	-0.017	-0.194 [*]	0.069	0.295 ^{**}	0.016	0.022	0.082	1.000

* Significance at 0.05 level.

** Significance at 0.01 level.

access to development accelerators (Y_3), and poverty status (Y_4), the same nine independent variables are used.

The regression coefficient column in Table 9 indicates the variables that contributed significantly to the dependent variables selected in the analysis. For the migrant group, perceived political participation (Y_2), perceived access to development accelerators (Y_3), political commitment (X_9), and farm employment status (X_8) contributed significantly to perceived social integration (Y_1). However, the farm employment status (X_8) indicated a negative beta coefficient, signifying that unfavorable employment status (unemployed or perhaps employed part time) did not contribute to the migrants' perceived social integration (Y_1).

For the same group, age (X_2) and total family (X_4) contributed significantly to perceived political participation (Y_2), while only farm size operated (X_6) contributed to the migrants' perceived access to development accelerators (Y_3). It is very common among rice peasant producers to experience a high incidence of poverty in West Malaysia. Among the migrants, dependent children (X_3), land tenure status (X_7), and farm size operation (X_6) contributed to poverty status (Y_4) very significantly. Dependent children (X_3) had a significant negative regression coefficient, indicating that the more dependent children a peasant had, the poorer he tended to be. On the other hand, both land tenure status (X_7) and farm size operated (X_6) had a significant positive beta coefficient.

The percentage of the variance explained by the independent

Table 9. Regression analyses of the posited relationships among migrants and non-migrants

Dependent variables	Independent variables	Migrant Regression Coefficient	Non-Migrant Regression Coefficient
Perceived social integration (Y_1)	Perceived political participation (Y_2)	0.323 [*]	0.063
	Perceived access to development accelerators (Y_3)	0.268 [*]	0.351 ^{**}
	Poverty status (Y_4)	0.057	0.068
	Educational levels of attainment (X_1)	0.046	0.052
	Age (X_2)	0.057	0.025
	Dependent children (X_3)	0.178	-0.158
	Total family (X_3)	0.178	-0.006
	Perceived kinship closeness (X_5)	0.029	0.090
	Farm size operated (X_6)	-0.059	0.025
	Land tenure status (X_7)	0.052	0.025
	Farm employment status (X_8)	-0.269 [*]	-0.125
	Percent variance explained (R^2)	0.300	0.193

* Significant at the 0.05 level.

** Significant at 0.01 level.

Table 9. (continued)

Dependent variables	Independent variables	Migrant Regression Coefficient	Non-Migrant Regression Coefficient
Perceived political participation (Y_2)	Education levels of attainment (X_1)	0.123	0.156*
	Age (X_2)	0.315*	0.010
	Dependent children (X_3)	-0.160	0.002
	Total family (X_4)	0.242*	0.047
	Perceived kinship closeness (X_5)	-0.140	-0.040
	Farm size operated (X_6)	0.102	0.016
	Land tenure status (X_7)	0.241	0.078
	Farm employment status (X_8)	-0.106	-0.023**
	Political commitment (X_9)	-0.036	-0.691
Percent variance explained (R^2)		0.186	0.557
Perceived access to development accelerators (Y_3)	Educational levels of attainment (X_1)	-0.004	0.182
	Age (X_2)	-0.048	-0.147
	Dependent children (X_3)	-0.067	0.084
	Total family (X_4)	0.059	-0.120
	Perceived kinship closeness (X_5)	0.121	0.449**

Table 9. (continued)

Dependent variables	Independent variables	Migrant Regression Coefficient	Non-Migrant Regression Coefficient
Poverty status (Y_4)	Farm size operated (X_6)	0.254 [*]	-0.008
	Land tenure status (X_7)	0.051	0.073
	Farm employment status (X_8)	0.160	-0.079
	Political commitment (X_9)	-0.096	-.089

	Percent variance explained (R^2)	0.137	0.265
	Educational levels of attainment (X_1)	-0.018	-0.060
	Age (X_2)	-0.126	0.028
	Dependent children (X_3)	-0.659 ^{**}	-0.639 ^{**}
	Total family X_4)	0.031	0.001
	Perceived kinship closeness (X_5)	-0.126	-0.192 [*]
	Farm size operated (X_6)	0.215 [*]	0.730 ^{**}
	Land tenure status (X_7)	0.314 ^{**}	-0.070
	Farm employment status (X_8)	0.161	0.024
	Political commitment (X_9)	0.040	-0.017
	Percent variance explained (R^2)	0.437	0.695

variables on the dependent variables is presented in the last column of Table 9. For the migrant group, 30 percent of the variance for the perceived social integration was explained by the 12 independent variables selected in the study. For the perceived political participation, only 18.6 percent of the variance was explained by the selected nine independent variables.

For the perceived access to development accelerators, only 13.7 percent of the variance was explained by the same nine independent variables. It seems that the nine independent variables selected provided a better explanation of poverty status among the migrants. The variance explained for this dependent variable was 43.7 percent.

For the non-migrants, the relationship the independent variables had on the dependent variables selected are shown in Tables 9 and 10 and are relevant to the findings.

The zero-order Pearson correlation coefficients in Table 11 helped verify the hypotheses stated for the study among the non-migrants. There were only two hypotheses that were significantly supported in the study. Among the non-migrants, perceived access to development accelerators (Y_3) and perceived kinship closeness (X_5) were significantly related to perceived social integration (Y_1).

From this correlation coefficient table, other postulated hypotheses, where perceived political participation (Y_2), poverty status (Y_4), educational levels of attainment (X_1), age (X_2), dependent children (X_3), total family (X_4), farm size operated (X_6), land tenure status (X_7), farm employment status (X_8), and political commitment were

related to perceived social integration (Y_1), were not supported.

In examining the non-migrants' poverty status (Y_4), a number of variables seemed to be significantly related to this dependent variable. Among them, dependent children (X_3) and perceived kinship closeness (X_5) were negatively related to poverty status (X_4), while farm size operated (X_6) and farm employment status (X_8) had a positive relationship.

Table 9 also shows multiple regression findings for the selected dependent and independent variables among the non-migrant group. As far as they are concerned, only their perceived access to development accelerators (Y_3) contributed significantly to their perceived social integration (Y_1). The amount of variance explained by the selected independent variables on this dependent variable was only 19.3 percent.

On the other hand, when the perceived political participation (Y_2) was used as a dependent variable, 55.7 percent of the variance was explained by the selected nine independent variables. Political commitment (X_9) contributed very significantly to non-migrants' perceived political participation (Y_2). In terms of their perceived access to development accelerators (Y_3), 26.5 percent of the variance was explained by the selected nine independent variables. Educational levels of attainment (X_1) and perceived kinship closeness (X_5) contributed very significantly to perceived access to development accelerators (Y_3).

Among the migrants, 43.7 percent of the variance in poverty status (Y_4) was explained by the selected nine independent variables. However, among the non-migrants, the variance explained by these same independent

Table 10. Zero-order Pearson correlation for the migrant group (N = 100)

	Y ₁	Y ₂	Y ₃	Y ₄	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆	X ₇	X ₈	X ₉
Y ₁	1.000												
Y ₂	0.059	1.000											
Y ₃	0.381**	0.106	1.000										
Y ₄	-0.001	0.046	-0.270	1.000									
X ₁	0.111	0.292**	0.171*	0.036	1.000								
X ₂	-0.024	-0.086	-0.141	0.080	-0.116	1.000							
X ₃	-0.110	0.063	0.049	-0.407**	-0.002	0.230**	1.000						
X ₄	0.032	0.133	-0.038	0.117	0.150	0.036	-0.048	1.000					
X ₅	0.228**	-0.052	0.409**	-0.186*	-0.062	0.069	-0.032	0.125	1.000				
X ₆	0.028	0.103	-0.032	0.543**	0.125	0.281**	0.297**	0.156	-0.027	1.000			
X ₇	0.043	0.058	0.81	0.032	0.147	0.005	-0.036	-0.059	0.021	0.116	1.000		
X ₈	-0.090	-0.027	-0.044	0.170*	0.089	0.085	-0.065	-0.065	0.025	0.188*	0.337**	1.000	
X ₉	-0.024	-0.720**	-0.127	-0.009	-0.168*	0.116	0.082	0.099	0.014	0.073	0.048	0.064	1.000

*Significance at 0.05 level.

**Significance at 0.01 level.

variables increased to 69.5 percent. Three independent variables seemed to have contributed significantly to the non-migrants' poverty status. They were dependent children (X_3), perceived kinship closeness (X_5), and farm size operated (X_6).

Similar to the migrant group, dependent children (X_3) and perceived kinship closeness (X_5) had a negative beta coefficient for the non-migrant group.

Another independent variable that contributed very significantly to the non-migrants' poverty status (Y_4) was their farm size operated (X_6) with a beta coefficient of 0.730. This could be the most predictive variable that influenced the rice peasant producers' poverty status in West Malaysia. But the most universal determinant of poverty status among the rice peasant producers in West Malaysia was, in fact, the number of dependent children they had. For both the migrant and the non-migrant groups, the variable had a negative beta coefficient (-0.659 for the migrants and -0.639 for the non-migrants), which signified that the greater the number of dependant children a peasant had, the poorer he tended to be. However, the relationship could have been a reciprocal one.

Migrants' and Non-migrants' Socio-economic Status Changes

Many methods can be used to elicit various socio-economic status changes among the rice peasant producers between given time periods in West Malaysia. This study used a simple t-test procedure to compare changes among the selected variables for the two groups before and after the migration process. Table 11 is the outcome of the procedure.

Supplementary tables in the appendix also illustrate changes in terms of the frequency distributions of both groups in various categories of the selected variables. Among them, Appendix Tables 3a, 3b, 4a, 4b, 5a, and 5b provide this information. Likewise, Table 4 and Appendix Tables 1a and 1b provide descriptive statistics for the predictor variables selected at both T_1 and T_2 periods. A detailed picture of the frequency changes among related aspects of the rice peasants' characteristics are given in Appendix Table 1c; they are self-explanatory.

From the information in Table 11, only three out of 11 variables selected for this purpose were non-significant between the two groups. These were their poverty status (Y_4), dependent children (X_3), and political commitment (X_9). Neither migrants nor non-migrants seemed to have alleviated their poverty problem after a period of about 15 years. Even after migration to a new agricultural settlement, most of the migrants remained poor. Table 4 illustrates a lower average for the per capita per month poverty line income proportion for the migrants; it illustrates the same for the non-migrants.

The second variable was dependent children (X_3). For both groups, dependent children were still numerous. This variable was very highly correlated to poverty status (Y_4).

The third variable of political commitment (X_9) was consistent between the two time periods. The non-migrants had associated themselves with the same political party for about 15 years. The migrants' view of political commitment was not to be involved in any

Table 11. A comparative status changes of some predictor variables between the migrants and the non-migrants for T_1 and T_2 periods

Variables	F Value	2-Tail Prob.	Pooled variance estimate			Separate variance estimate		
			T Value	Degrees of Freedom	2-tail Probability	T Value	Degrees of Freedom	2-tail Probability
CHANGE IN (Y_1)	7.82	0.000	7.72	198	0.000	7.72	123.90	0.000
CHANGE IN (Y_2)	2.04	0.000	6.98	198	0.000	6.98	1777.28	0.000
CHANGE IN (Y_3)	2.76	0.000	-9.69	198	0.000	-9.69	162.50	0.000
CHANGE IN (Y_4)	1.18	0.418	-1.06	190	0.290	-1.06	184.88	0.292
CHANGE IN (X_3)	1.88	0.006	1.19	167	0.237	1.28	166.99	0.214
CHANGE IN (X_4)	2.14	0.000	-4.66	191	0.000	-4.63	165.63	0.000
CHANGE IN (X_5)	20.72	0.000	-3.16	198	0.002	-3.16	108.53	0.002
CHANGE IN (X_6)	1.63	0.023	2.34	175	0.020	2.27	140.76	0.025
CHANGE IN (X_7)	7.51	0.000	3.92	198	0.000	3.92	124.90	0.000
CHANGE IN (X_8)	2.37	0.000	2.41	197	0.017	2.40	168.05	0.017
CHANGE IN (X_9)	1.53	0.035	-0.89	198	0.373	-0.89	189.66	0.373

political party. Appendix Table 1c clarifies this claim for both the groups.

In regard to their poverty status, Appendix Tables 4a, 4b, 5a, and 5c provide various sub-groups of migrants and non-migrants who earn the total net seasonal income and their proportion of poverty line income per capita for the two time periods. The number of those who had improved their income, particularly among the migrants, was very minimal. But among the non-migrants, the number who had improved their income from T_1 to T_2 period was quite a few, particularly at the level of equal to or more than Malaysian \$1,201 per season.

The perception of social integration for both groups differed very significantly between the two time periods. This difference was also significant between the groups, as show in Table 4. There was an improvement in their perception of social integration into their present communities. The perception of political participation, access to development accelerators, and kinship closeness differed between the two groups, although within groups, such a difference may not indicate a significant achievement. The slight increase in their mean scores in Table 4 clearly illustrates this point.

The total family changes that differed between the two groups also were found to differ within each group. Both have reduced some numbers between the two time periods as indicated by Table 4.

It seems that, so far, all of the variables that indicate a significant difference between the two groups, for the two time periods, differed very significantly. Within each group, the migrants improved

their farm size operated somewhat, while their counterparts have had a slight reduction in their farm size operation. By the same token, an improvement in the farm employment status after migration by the migrants resulted in a significantly different change of this variable between the groups. This was because the non-migrants also had improved their farm employment status, as illustrated in Appendix Table 1c.

Appendix Tables 3a and 3b illustrate the detailed frequency distribution of various farm size categories for the migrants and the non-migrants at the two time periods. The major change among the migrants was the farm size increase from 1.16 to 1.73 hectares. Here, there was an increase of 57 percent for those currently operating a farm size in this range. On the other hand, a slight reduction was found among the non-migrants for those operating a farm size equal to or greater than 2.88 hectares; non-migrants who did not farm increased from 0 to 3 persons.

The research findings of Chapter 6 is illustrated in Table 12 by a self-explanatory list of the hypotheses that are supported by the study.

Summary and Conclusion

The empirical findings of the study presented in this chapter delineate the characteristics of both the migrants and their non-migrant counterparts in terms of both the basic characteristics and the discriminating characteristics of the two groups.

From the basic characteristics, the migrants seemed to perceive themselves as less socially integrated into their community of origin

Table 12. List of the supported hypotheses in the study

Hypotheses	Level of Significance Supported
1) The following variables differ significantly between the migrants and the non-migrants:	
a) Perceived social integration	0.01
b) Perceived access to development accelerators	0.01
c) Poverty status	0.01
d) Age	0.01
e) Dependent children	0.01
f) Total number of families	0.05
g) Perceived kinship closeness	0.01
h) Farm size operated	0.01
i) Land tenure status	0.01
j) Farm employment status	0.01
k) Political commitment	0.01
2) The relationship between the following variables for the migrants:	
a) Perceived social integration and perceived political participation and access to development accelerators	0.01
b) Perceived social integration and political commitment	0.05
c) Perceived political participation and total family and land tenure status	0.01
d) Perceived political participation and education	0.05

Table 12. (continued)

Hypotheses	Level of Significance Supported
e) Perceived access to development accelerators and farm size operation and farm employment status	0.01
f) Perceived access to development accelerators and land tenure status	0.05
g) Poverty status and age and dependent children	0.01
h) Poverty status and land tenure status	0.05
3) The relationship between the following variables for the non-migrants:	
a) Perceived social integration and perceived access to development accelerators and kinship closeness	0.01
b) Perceived political participation and education and political commitment	0.01
c) Perceived access to development accelerators and education	0.05
d) Perceived access to development accelerators and perceived kinship closeness	0.01
e) Poverty status and dependent children and farm size operated	0.01
f) Poverty status and perceived kinship closeness and farm employment status	0.05

than the non-migrants. Although they seemed to perceive better access to development accelerators than their non-migrant counterparts, perception of kinship closeness favored the non-migrants. By the same token, the migrants' educational level of attainment was slightly lower than the non-migrants'. As far as age was concerned, the migrants tended to be younger than the non-migrants.

The number of dependent children also was different between the two groups. Migrants tended to have fewer dependent children than the non-migrants. However, the same did not occur for the total number of families, because the migrants seemed to have a higher average total number of families than the non-migrants. It was also discovered that the migrants tended to be poorer than their non-migrant counterparts. As such, their farm size operation was found to be smaller, and their farm employment status was also less favorable than their counterparts'.

Land tenure status was fairly similar for migrants and non-migrants, with the exception that among the non-migrants, the majority were tenant-operators (56%), while among the migrants, the majority were owner-tenants (59%). Another interesting aspect was their political commitment. The majority of the migrants (91%) did not commit themselves to any political parties, while most non-migrants (87%) were committed to a political party.

The study also identified the variables that really differentiated between the two groups of migrants and non-migrants. From the discriminant analysis procedure, it was discovered that political commitment, perceived kinship closeness, perceived access to development

accelerators, perceived social integration, perceived political participation, and poverty status form the significant discriminant coefficients differentiating between the groups. Thus, the hypothesis that social integration is inversely related to migration decision-making was significantly supported.

While the study did find that certain factors acted as the most predictive scores differentiating between the two groups, when each predictor variable was treated individually, the F-ratio values clearly indicated that perceived political participation and educational levels of attainment did not differ significantly between the two groups. Thus, the hypotheses regarding their status were accordingly verified.

In attempting to elicit factors that influenced rice peasant producers' social integration into their community, only four factors -- perceived political participation, access to development accelerators, employment status, and political commitment -- contributed significantly to the migrants' perceived social integration into their community of origin. On the other hand, only one factor, namely perceived access to development accelerators, contributed to the non-migrants' perceived social integration.

The study also revealed two consistent variables that contributed to the poverty status of both migrants and non-migrants: dependent children and farm size operated. Land tenure status was found to contribute to the migrants' poverty status, while for the non-migrants, perceived kinship closeness contributed to their poverty status.

The percentage of variance explained by the same nine independent

variables for poverty status was the highest to be elicited in the study. For the migrants, the percentage of variance explained was 43.7 percent, while for the non-migrants, it was 69.5 percent. On the contrary, the explained variance for perceived political participation for the non-migrants (55.7%) was higher than that of the migrants (18.6%). But the opposite was found to be true in the case of the explained variance for the perceived social integration. In the case of the migrants, 30.0 percent of the variance was explained by the selected independent variables, whereas for the non-migrants, the explained variance was only 19.3 percent.

Changes in the socio-economic status of the two groups were very clear, but their poverty status, dependent children, and political commitment remained almost the same over the 15-year period.

In summary, the study has elicited a number of interesting issues with respect to the characteristics, discriminating factors, and the socio-economic changes between the migrant and the non-migrant rice peasant producers of West Malaysia. These findings can indeed fill in the gaps that exist in the lack of comparative-contrast analytical aspects of the migrants and their non-migrant counterparts within a single study.

CHAPTER 7. DISCUSSION

The discussion of the research findings presented in the preceding chapter will be explained in relation to the issues of inconsistency of internal migration determinants and differentials, the role of social integration in influencing rice peasant producers' migration decision-making, and the factors that are related to and influenced the perceived social integration among members of the peasant producers' community.

Examining the socio-economic changes between the two groups after the migration process will reveal whether or not the decision to migrate made by some peasant producers has indeed benefited them socially and economically. Changes in the selected variables between T_1 and T_2 periods will be discussed.

One of the ways to verify the inconsistency or irregularity of the determinants and differentials of migration is by first comparing the basic characteristics of both the migrants and the non-migrants at T_1 period. The means of the selected variables for the study and the frequency distribution of some of these variables may offer a simplified comparative analysis.

The next step is to identify the selected variables which have significantly differentiated the two groups. The univariate analysis as presented by the U-statistics will be used. Despite looking at the selected variables individually, their level of significance can provide a preliminary indication of their role in differentiating between the two groups. Then, by looking at the discriminant scores of these selected variables through multivariate statistical analysis, variables

that possess the most predictive power in differentiating the two groups, after taking into consideration their interdependencies on each other, will subsequently surface.

Finally, the role of any variable in influencing the decision to migrate can be analyzed by observing factors that are related to them, and at the same time contribute to their persistence. As social integration is postulated to be an evaluative mechanism influencing peasant producers' decision to migrate, more emphasis will be given to this variable in the discussion of the research findings.

Inconsistency of Migration Determinants

Perceived social integration

From the study, perceived social integration, which represents the Malay rice peasant producers' social integration into their community, was found to be different between the two groups. The migrants seemed to be less socially integrated into their community of origin. This finding concurs with those findings of Abeysekera (1984) among the Sri Lankan rice peasant producers, Gallin and Gallin (1980) among the return migrants from Taipei, Taiwan, and that of Choi (1984), who discovered that the return migrants from the city of Seoul in South Korea did so because of their lack of social integration in the city community.

Studies conducted among the developed societies have proven that social integration, which is represented by various indexes such as the satisfaction index (Speare, 1974; Bach and Smith, 1977), community participation (Hennigh, 1978), and adjustment to the new community of

residence (Glasgow and Sofranko, 1980), is inversely related to the decision to migrate. In view of this similar finding, social integration as a determinant of migration is indeed consistent across societies.

Among the Malay rice peasant producers of Yan district, this migration determinant differentiated the migrant peasant producers from their non-migrant counterparts very significantly as the univariate analysis indicated (Table 5). Subsequently, being one of the four most predictive scores (beta coefficient = -0.385) of the migration behavior, the social integration variable has played a very significant role in inducing those migrant peasant producers to out-migrate from their community of origin.

The study unequivocally verified the hypothesis postulated by Goldscheider (1971) that social integration is inversely related to the decision to migrate. That those who perceived themselves as less socially integrated into the community of origin among the rice peasant producers of Yan district out-migrated, in search of perhaps a more favorable community where they could reestablish themselves and gain a stronger integration, has also been proven by the study. Their score for the variable increased when compared with their score at their community of origin.

As the score in parentheses for the variable in Table 4 indicates, an increase of 1.59 points for the social integration score may prove that these migrants were able to adjust to the new environment, and managed to implant the idea of social attachment, solidarity, and

satisfaction to their new community of destination.

Perceived political participation

Peasant producers' perceived political participation may not be highly correlated to their political commitment, particularly among the migrant group. But a significant negative correlation with political commitment was indicated among the non-migrants. Also discovered (Appendix Table 1c), was that the majority of the migrants did not play much role either as ordinary committee or executive committee members.

As such, the variable did not provide a clear difference between the two groups. The mean scores for both groups (Table 4) indicated that a slight difference exists. This provided a preliminary understanding that the variable did not hold as a consistent determinant of migration behavior. Contrary to the findings by Gallin and Gallin (1980) and Choi (1984), Malay rice peasant producers perceived themselves as only fairly active in political participation, and among the two groups, it cannot be considered that this perception was an important element in influencing their decision to migrate, as was the case with the return migrants from Taipei (Gallin and Gallin, 1980) and Seoul (Choi, 1984).

The inconsistency status of the variable in the study was supported in the univariate analysis. The lowest F-ration that the variable had did not include it as a discriminating behavioral variable differentiating between the groups. However, when all the variables were analyzed together in the multivariate analysis, this variable registered the fifth highest predictive score discriminating between the

two groups.

There is a good reason to believe that its role as a predictive score differentiating between the two groups stemmed from the association it had with other variables. From Appendix Table 6, perceived political participation (Y_2) was quite highly correlated with educational levels of attainment (X_1), total family (X_4), land tenure status (X_7), and political commitment (X_9). Both Tables 8 and 10 illustrate the zero order correlation that the variable had with different variables for the migrant and the non-migrant groups.

For instance, among the migrants, perceived access to development accelerators (Y_3), poverty status (Y_4), total family (X_4), and land tenure status (X_7) had high correlation to this variable. Likewise, among the non-migrants, high correlation with educational levels of attainment (X_1) and political commitment (X_9) were registered. It was, therefore, appropriate to claim that as far as this study is concerned, the variable is considered an inconsistent determinant of migration behavior.

Perceived access to development accelerators

The finding of the study, with respect to this variable, was unexpected because it seemed that the migrants perceived a better access to development accelerators than their non-migrant counterparts. Table 4 illustrates the average points score for both groups. It also seemed to contradict the earlier suggestion by Shari and Sundaram (1982) that access to development accelerators such as farm credits and inputs would satisfy peasant producers, and as such they would prefer their community

of origin to sustain their relationships with the local politicians who ensured that their access was maintained. Baharuddin (1983) has proven that the patron-client relationships between peasants and politicians guaranteed the peasants such benefits.

However, one must consider whether or not the action taken by the migrants represented their appropriate translation of such a perception. In this case, it did not, and the reason could be that the perception of extensive access did not take into account what kind of development accelerators they really had access to. It could also possibly be that those kinds of development accelerators did not really offer them enough benefits to inhibit them from out-migrating.

For instance, among the migrants, access to development accelerators (Y_3) was very significantly correlated to their poverty status (Table 8). Therefore, the development accelerators they were associated with did not actually contribute to the alleviation of their poverty problems, something they saw as an urgent one to be solved. By out-migrating to a new location, their hope of alleviating this problem was still alive. In-depth research into this matter may help clarify the claim.

Consequently, the variable's role as a determinant of migration behavior fell short of the expected outcome. As such, for the study, despite its discriminating function as indicated by the F-ratio and the standardized discriminant coefficient, this particular variable was far from being a uniquely consistent migration determinant.

Poverty status

The Muda irrigation project has been the most successful rice growing region in West Malaysia (Bell et al., 1982), but poverty among the households involved in rice cultivation is still widespread (Shukur Kassim et al., 1983; Gibbons, 1984). This study has come to the same conclusion as that of Gibbons' (1984): that rice peasant producers in Yan district, within the project area, are among the poorest households in the state of Kedah. Poverty status among both the migrant and the non-migrant groups is an unending problem which is difficult to reduce, particularly within the context of the current approach to agricultural development (Baharuddin, 1983; Gibbons, 1984; Abdul Karim, 1985).

Prior to the migration process, the migrants were the poorest group when compared with the non-migrants (Table 4). Among the migrants, older age, a large number of dependent children, and unfavorable land tenure status were highly correlated to poverty status. It is no wonder that the majority of them (62%) perceived that they were poor, compared with only 15 percent poverty among their non-migrant counterparts (Appendix Table 1c).

As a discriminating factor for the two groups, poverty status (Y_4) differed very significantly and thus was among the top predictive scores differentiating between the two groups. It was, therefore, a natural instinct among the migrants to decide to out-migrate in search of a better place to alleviate this problem. This is in agreement with the findings that migration is influenced by the economic needs of the individual migrants (Todaro, 1976), despite others (Goldscheider, 1971;

Sjaastad, 1962; Sofranko and Williams, 1980; De Jong and Gardner, 1981; Abeysekera, 1984; Choi, 1984) who espouse that economic need is only one of many determinants of internal migration.

From the multivariate analysis among the non-migrants, poverty status was also contributed to by variables such as a large number of dependent children, perceived kinship closeness, farm size operated, and farm employment status. Therefore, the study supports the claim made by Shukur Kassim et al. (1983) that these factors are among the causes of poverty among the rice peasant producers in West Malaysia.

The contribution of these factors, farm size, land tenure status, large numbers of dependent children, and farm employment status as a whole, on the poverty status of rice peasant producers in West Malaysia, are considered ordinary findings. However, the relationship that poverty status had with perceived kinship closeness is, empirically, something new. Perhaps the prevailing attitude and conceptualization of kinship ties among Malay rice peasant producers are true to the popular saying of "berat sama dipikul, ringan sama dijinjing" which literally means that both acute as well as simple problems are equally shared and shouldered among relatives.

Thus, the study has also confirmed the observation made in other ethnographic studies (Wilson, 1967; Swift, 1965; Fisk, 1964; Ali, 1975, 1981; Kuchiba et al., 1979; Horrii, 1981; Wan Hashim, 1984) that despite being poor, Malay peasant producers are always prepared to extend help to other relatives who live in destitution.

Educational levels of attainment

Educational levels of attainment is a very important determinant of internal migration in both developed and developing countries (Shaw, 1975). Empirical studies conducted by Caldwell (1970) in Ghana, Beshar and Nishura (1961) in the United States, Speare (1974) in the United States, Pryor (1979), Selvaratnam and Dissanayake (1979), and Sulaiman (1981) in Malaysia, concluded that higher educational levels of attainment were highly related to the decision to migrate. The fundamental reason for such a relationship was the prevailing employability situation in all these countries, as far as high educational status was concerned.

While most of the above studies reflected more of the rural-urban migration flow, studies which concentrated on the rural-rural migration flow (Kaplan et al., 1977; Sulaiman, 1981; Abeysekera, 1984) found no significant relationship between educational levels of attainment with the propensity to migrate or actual migration. For instance, Sulaiman (1981), using data gathered by Kaplan et al. (1977) found a very slight negative correlation between education and the propensity to migrate among the potential rural migrants in West Malaysia.

This study found that educational levels of attainment did not differ significantly between the migrant and the non-migrant groups. The migrants' average educational levels of attainment was slightly lower than that of the non-migrants. Thus, the variable is inconsistent as far as a determinant of migration is concerned. Despite not being a strong predictor of migration behavior, among the non-migrants the

variable contributes very significantly to their perceived political participation and access to development accelerators. It is, therefore, quite appropriate to assert that a little higher level of educational attainment, particularly among the non-migrants, affects their perception of active political participation and access to development accelerators, while with a lower level of education among the migrants, such a perception was not found.

The variable's association to poverty status was also not significant, which is contrary to a suggestion made by Gibbons et al. (1980) that lower educational status causes poverty among the rice peasant producers. Here, the role of educational status was only secondary in determining the poverty status of the rice peasant producers. Rather, the primary causes of the peasants' poverty status were their dependent children, farm size operated, land tenure status, and to some extent, their perceived kinship closeness.

Also among the non-migrants, the higher level of educational attainment was highly correlated to their political commitment. Such a relationship did not occur among the migrants, except that with such lower levels of educational attainment, they failed to receive better employment status, and their land tenure status had also been unfavorable. It is, therefore, safe to assume that education is important in the way a peasant engages in various dealings, such as securing more land from landlords to farm, and thus improving his farm employment status from part-time to full-time. In this way, the problem of poverty could be avoided. It seems that this kind of chain relationship between

education and poverty existed among the migrant peasant producers of Yan district.

There is also evidence (Gibbons et al., 1980; Sulaiman, 1981) that the Malaysian peasant does not have high educational levels of attainment. Since there is a uniformity of educational levels of attainment among them, the relationship that is revealed in the study shows a very weak relationship.

Age

The study revealed that the age of the migrant peasant producers was younger than their non-migrant counterparts. This situation reflects the earlier confirmation by Bogue (1959), Lee (1966) and Goldscheider (1971) that age was the most consistent determinant of migration. It significantly differentiated between migrants and non-migrants in the study, despite the fact that the difference in the average age of the two groups was only nine years.

The average age for the migrants would have been younger if it had been a rural-urban migration phenomenon. Young (1978) claims that rural-rural migrants are much older than the rural-urban migrants in West Malaysia. For the rural-rural migrants, the idea of competing for a better paying job in a rural agricultural sector did not even exist, because most rural jobs did not involve any kind of systematic or official appointment procedures. Hence, age and educational backgrounds did not form relevant selection criteria.

Appendix Table 2a illustrates the frequency distribution of age by the respondent categories. Most migrants were between the ages of 20 to

39 years, while among the non-migrants most were between the ages of 30 to 49 years. Preliminarily, it seems that the age structure among the Malay rice peasant producers in West Malaysia is indeed associated with the social differentiation and stratification within a given community, as was perceived by Goldscheider (1971) among the African clans and Syed Husin Ali (1975) among the Malay peasant societies of the three villages that he had studied. Thus, most older peasants did not out-migrate. At the outset, it seemed that these older non-migrants must be very involved in community activities such as political participation and on the whole, were strongly integrated into their community of origin.

Evidently, the study could not arrive with a very clear indication of the association of age to perceived social integration, particularly among the non-migrants. There was a very weak negative correlation between age and perceived political participation among this group of peasant producers. This relationship showed that age was not an important asset in such an activity. One basic reason for such a situation may be that of the changing role of the older peasants within the village communities of West Malaysia.

One of the interesting aspects of this finding is that despite being one of the discriminating variables differentiating between the two groups, age failed to be among the most predictive score for the migration behavior. This engenders an important question: Does age really matter to a person, particularly a peasant producer, who out-migrates from one rural agricultural settlement to another? From the multivariate analysis of the data in the study, age did not seem to be

an important factor in rural-rural migration, particularly in West Malaysia.

The significant negative correlation between age and poverty status among the migrant peasant producers may suggest that the out-migration of older peasant producers was triggered by their hope of alleviating the persistence of poverty that encroaches upon them.

Dependent children

The consistency of this variable as a determinant of migration in relation to the previous studies cited in the literature review is inherent in its significant difference as indicated by the F-ratio in Table 5. The non-migrants seemed to have a larger number of dependent children when compared to the migrants. However, in terms of it being a strong predictive score for the migration behavior, the variable indicated a rather weak predictive ability when compared to other variables.

The finding confirms an earlier study by Kaplan et al. (1977) that among the West Malaysian rural population, the larger number of dependent children inhibited the propensity to migrate to another place of residence. With a large number of dependent children, particularly when some of them are still in school, parents tended to think less of migrating. A smaller number of dependent children made it easier for parents to make arrangements for a move, as well as reestablishing their children in school.

This situation is termed social-capillarity in the Dumont-Banks model (Petersen, 1969) and explains social and geographic mobility.

Individuals with a large number of dependent children faced more difficulties and carried greater burdens in climbing social status ladders. This made it difficult for them to be geographically mobile enough to achieve higher social status elsewhere. In another study, Chang and Pendleton (1986, forthcoming) have reported that family size tended to retard migration for all age groups.

The same situation, as has been revealed in this study, persisted in the United States. Bach and Smith (1977) suggested that with a large number of dependent children, potential migrating parents had difficulty deciding to migrate because the existing ties in the neighborhood and the school system did not permit them to think only of their own interests. Shaw (1975) agreed with this concept, and thus, the findings in this study are consistent with studies mentioned earlier.

With a large number of dependent children, non-migrants had to ensure that they had enough farm land to cultivate, in order to support the family until the children could be on their own. The situation also prevailed among the migrants, as dependent children were highly correlated to the farm size operated for both groups. Since the migrants were at a disadvantage when compared with the non-migrants in terms of land tenure status and farm employment status, they had to work harder to ensure the future of their children. Hence, with an unfavorable status in these three variable, migration may be the only way out for them to help prepare for their children's future.

Perhaps this is one of the reasons that migrants were not prepared

to get involved with political commitments for fear that an indulgence in such activity might hinder their full concentration in working hard to earn a better standard of living. For the non-migrants, the problem of dependent children was also a factor to consider in the degree of commitment to local politics, but it was not as important. It could be, that by just being an ordinary member would make it sufficient for them to live with the same norms as others did in their community.

To summarize the existing differences between both groups with respect to this variable, the study found that the variable had significantly differentiated between the two groups despite not being an important predictive score for the migration behavior. But evidence revealed by the study clarifies that for both the migrants and the non-migrants, a large number of dependent children was a very significant contributor to their poverty status.

Total family and perceived kinship closeness

Malay peasant communities, according to Kuchiba et al. (1979), Horrii (1981), Syed Husin Ali (1975), and Wan Hashim (1984), are built through the persistence of strong kinship ties. Therefore, for those with a large number, or even few households with kinship ties within the village, a period of poor harvests will not create a despondent situation. However, if those around them are also living in poverty, then out-migrating to a place where their own survival does not depend on the number of kin one has would be the best decision.

Hence, the study reveals that migrants, despite having a large number of households with kinship ties, out-migrated for the above

reason. In an earlier study (Haji Bakar et al., 1980), cases where family feuds and frictions existed among kin-folk, out-migration had been the outcome. This study indicates that the more the number of total family, the better the perceived kinship closeness the migrants had at their place of origin. The same positive relationship persisted among the non-migrants, although the relationship was not highly significant.

Therefore, migration, in this study, did not reflect the frictions migrants had with their kin-folk, because they perceived that they had very close tie with their relatives. The study has also proved that perceived kinship closeness differs significantly between the two groups. It is the second best predictive score of migration behavior among the Malay rice peasant producers in West Malaysia.

Thus, while migrants perceived that they were very close with their relatives, the non-migrants perceived an even closer kinship tie with their relatives. This supplements the prevailing situation where with perceived kinship closeness, non-migrants tend to live in poverty because helping their relatives is an important obligation that they have. It is also related to their social integration.

For the total family, its discriminant coefficient was also statistically significant. Thus, as a predictive score for migration behavior, total family can be considered as having a fair influence on the decision to migrate.

Farm size operated, land tenure and farm employment status

Land provides the rural peasants in West Malaysia with a number of social and economic assets. Land ensures them desirable employment status, and by farming their own piece of land, their tenure status will be very favorable. A peasant who farms rented land of three hectares may be able to produce higher yields than another who operates one and half hectares of his own land. But, after taking care of the rental charges, the owner-operator will be better-off than his tenant-operator counterpart.

Besides having to pay rental charges, the security of the tenancy arrangement is still a status that needs to be maintained. Despite the enactment and implementation of the land tenancy act (Selvadurai, 1978), the security of the tenancy arrangement in West Malaysia still has various loopholes that need to be straightened out.

These three interrelated factors also differentiate the two groups very significantly. But, as predictive scores of the migration behavior among the rice peasant producers of Yan district, only their land tenure status had a slight edge over the other two variables. The non-migrants were found to be in a better situation as far as owner-operator status was concerned. Sulaiman (1981) (as mentioned earlier) stated that empirical evidence associating landlessness with the migration decision has not been recorded among the rural migrants in West Malaysia.

This study has empirically proved that land is one of the basic factors that influence peasant producers to out-migrate from their community of origin. This finding concurs with an earlier study (Haji

Bakar et al., 1980) that peasant producers, particularly those who are involved in rice cultivation, need a larger farm size of their own to solve their poverty problem. Since a solution cannot be found within the community of origin, colonizing undeveloped government land was thought to be a possible answer to the problem.

By out-migrating and developing larger rice farms in a new location, migrant peasant producers have not only increased the size of farm they operate, but the tenancy status and the farm employment situation have improved. This was evidenced by the increase in the average farm size operated at the T_2 period compared with that at the T_1 period. Thus, the consistency of farm size operated, land tenure and farm employment status as determinants of migration behavior particularly among rice peasant producers in West Malaysia is proven. Migration helped to improve these aspects of farming.

The roles of these factors in affecting the persistence of poverty among the rice peasant producers have proven what many would have expected. It can be concluded, therefore, that rice cultivation is not an occupation which offers great financial rewards unless a cultivator owns a large piece of farmland, or is able to compete with other tenants for larger pieces of farmland from a number of landlords. Said (1985) illustrates that the continuing success among some capitalist rice farm operators was inherent in their ability to secure larger pieces of farmland for rice production activities. As a result, small farm operators, who were mostly pure tenant-operators, were liable to be displaced by the bigger producers.

The introduction of new technology to the rice industry aggravated the existing situation because of the insecurity of the tenancy arrangement. With the advent of farm mechanization in the various stages of the rice production process (land preparation, transplanting, and harvesting), even agricultural laborers are now being displaced by farm machinery. This poses a number of questions pertinent to the advantages of adopting new technologies for rice production in the developing countries (Pearse, 1980). Pearse (1980) questions the inequitable distribution of access to these new technologies among the developing societies, and espouses that more appropriate technologies should be adopted that could absorb the surplus labor force in these countries.

With a large number of owner-tenants and agricultural laborers found among the migrant group, the study confirms that the new approach or method of rice cultivation really favors the bigger operators than the smaller ones.

Political commitment

Politics has been a newly added dimension to the peasant social system and it is becoming an important factor in agricultural and rural development in West Malaysia (Baharuddin, 1983). Peasants have to be committed to an appropriate political party if they are interested in acquiring access to development accelerators, particularly among the rice peasant producers (Baharuddin, 1983; Shukur Kassim et al., 1983).

The finding that the majority of migrants had no political commitments may also prove that local political commitment is an

important asset for a peasant to be successful in sustaining the level of social relationship he has. On the other hand, the non-migrants were found to be very committed to the local politics. This suggests that the community of origin is a community where the identification of peasants with a particular local political party is a must. Those who sit on the fence have no place among the rest of the community members who are politically inclined.

The variable differentiated between the two groups very significantly, and it was, in fact, the most predictive score for the migration behavior among the rice peasant producers in Yan district. During the period when the migration process took place, the two most influential Malay political parties, which used to be at odds with each other, have come together to form a coalition government with several other political parties in the country. The merger was not totally accepted by the members of one of the parties. As a result, a large number of them decided to abandon their political party and support neither party. The uncommitted peasants could be migrants from the dissatisfied group when the coalition took place.

When they migrated to the new area, their uncommitted status seemed to be the reason why they could not acquire ownership to the new rice plots (in addition to being the outsiders) (Haji Bakar et al., 1980). Realizing this outcome, a group of them organized a branch of the ruling political party at their place of destination, hoping that the government would recognize their colonization of the undeveloped land. Unfortunately, they failed to gain recognition, and as a result, the

extra acreage of land that had been confiscated during the eviction exercise was not returned to them. They now operate an average of about 3 acres of rice farmland each, compared to about 10 acres during their initial colonization process.

Currently, they are politically uncommitted because such a commitment brings little, if any, help. Unless their active participation could impress local politicians in the area, their chances of being absorbed into the fold of the ruling political party would at least guarantee them the proprietary right to the land that they now cultivate.

The non-migrants may not face this sort of problem because they were not involved in illegal land colonization. Despite not having that much of an edge, with respect to their land tenure status, when compared with their migrant counterparts, they still maintained their political commitment with the ruling political party. Such political loyalty differentiates them from their migrant counterparts.

Factors Influencing Social Integration

The preceding section describes the inconsistency of some of the variables selected for the study. This section will discuss the variables that influence the rice peasant producers' social integration into their community.

Perceived social integration is one of the most predictive variables for migration behavior. The study has revealed that the migrants were less socially integrated into their community of origin when compared with their non-migrant counterparts. Apparently, out of

the 12 variables selected to elicit their association and contribution to perceived social integration, only a few variables were related and found to have influenced the rice peasant producers' social integration.

Among the migrants, perceived political participation, perceived access to development accelerators, and political commitment were found to be significantly related to perceived social integration. Likewise, perceived political participation, perceived access to development accelerators, and political participation were found to significantly contribute to migrants' perceived social integration into their community of origin. However, their unfavorable farm employment status suggests that this kind of employment status was the main source of their social disintegration into their community of origin.

The finding that unfavorable farm employment status causes social disintegration concurs with an earlier observation by Scott (1983), in one of the villages of Yan district, that peasants who do not have full-employment are always ridiculed by other members of the village community.

Political commitment indicates a significant positive correlation and contribution to the migrants' perceived social integration. This may stem from the findings that the majority of the migrants were politically uncommitted. The same situation also existed with their perceived political participation. Since they were not politically committed, their perceived political participation would surely follow the same relationship patterns of that of their political commitment with perceived social integration.

A relationship exists between perceived access to development accelerators and perceived social integration, because these peasants who may not receive any aid through political commitment, would tend to appreciate them when such benefits are extended. Compared to their non-migrant counterparts, they have scored higher in the perceived access to development accelerators variable, and yet they have decided to out-migrate. As mentioned earlier, their decision to migrate was not actually based on the contribution of this variable to their perceived social integration, but rather to the kinds of development accelerators that they were offered - those that cannot really help solve their poverty problem. Thus, it would not be rationale for them to stay behind if alternatives for solving their poverty problems exist elsewhere.

From the multiple regression analysis, it was also found that the selected variables explained 30 percent of the variance in perceived social integration among the migrants, compared to only 19.3 percent among the non-migrants. However, the score for the variable between the two groups is important in determining which group is more socially integrated into their community of origin. In this case, the non-migrants were found to be more socially integrated into their community of origin despite having only 19.3 percent of the variance explained by the selected variable. This finding is what the study was trying to verify.

From the various ethnographic and socio-economic studies of peasant producers in West Malaysia, a number of variables were presumed to be related to community solidarity, coherence, satisfaction, and strong

ties. The selected variables were among the variables suggested by these studies to have influenced the peasants' social integration into their community.

The relationships and contributions of these variables to the perceived social integration among the non-migrants may help verify these presumed relationships. As Table 14 indicates, only perceived access to development accelerators and perceived kinship closeness were significantly related to the non-migrants' perceived social integration. With perceived kinship closeness, the study revealed that among the Malay rice peasants producers, kinship ties were similar to that of the Sri Lankan rice peasant producers - kinship ties were related to social integration into their community (Abeysekera, 1984).

The relationship between perceived access to development accelerators and perceived social integration is inherent in stronger political commitment status of the non-migrant peasant producers in the district.

The study also revealed that only one variable, that is the perceived access to development accelerators contributes or influences non-migrants' perceived social integration into their community. This would suggest that the non-migrants, particularly those who have committed themselves to the ruling political party, fared better in their community of origin compared with their migrant counterparts, with respect to social integration and access to development accelerators. This finding has also confirmed the observation made by Shukur Kassim et al. (1983), that politics has also penetrated various government

agencies responsible for distributing agricultural aid to peasant producers in West Malaysia.

Age, which was thought to be highly related and would contribute to the non-migrants' perceived social integration, was not revealed in the study. There was a weak negative correlation between non-migrants' ages and perceived social integration. Since social integration was partly measured in terms of social participation, and according to Syed Husin Ali (1975), village leadership roles have now been taken over by the younger persons, this negative relationship would explain the changing roles played by the younger villagers in their community welfare. Older persons are now beginning to relinquish their leadership status to the younger ones.

The study therefore has failed to verify the contributions of factors such as educational levels of attainment, age, dependent children, total family, perceived kinship closeness, farm size operation, land tenure status, farm employment status, poverty status, and political commitment to the perceived social integration among the non-migrant peasant producers. The study has revealed, however, that perceived social integration had the most predictive score differentiating between migrants and non-migrants. Thus, the contention that social integration is inversely related to migration behavior is true for the Malay rice peasant producers in West Malaysia.

While these selected variables failed to indicate influence on the social integration among the non-migrant peasant producers, most probably there were other factors such as economic investments, social

ties with neighbors, existence of various relevant social amenities and financial support, which may enhance the peasants' social integration. They have not been included in the study. Even those variables which were not acting as consistent determinants of migration behavior, yet contributed to social integration, were not found, except for the perceived access to development accelerators.

Migrant and Non-Migrant Socio-Economic Status Changes

The decision to migrate was made for a number of reasons. Among them were the need to improve their social integration, alleviate their poverty problems by improving their land tenure and employment status, and by having a larger farm to operate. Among the variables selected for this comparative analysis, perceived social integration, political participation, and access to development accelerators, dependent children, and farm size operated have somewhat improved the migrants' situation after moving to the new area.

Among their non-migrant counterparts, only perceived access to development accelerators, perceived kinship closeness and political commitment indicated a slight improvement, after a period of about 15 years, since their migrant counterparts had left their community. With such a slight change in their socio-economic status, their performance between the time before and after the migration process differed very significantly.

The migrants were able to adjust to the new environment and hence have improved their level of social integration into the new community. Likewise they have improved the farm size operated, while their non-

migrant counterparts have somewhat reduced their farm size operated. This is understandable as they grew older, they tended to relinquish most of their farmland to their children who were ready to take over the farming activities. The improvement of the migrants' farm size was made possible because they did not have to buy the land, but rather colonize it, according to the size they felt appropriate.

In the new area, the migrants perceived a better access to development accelerators, an attitude which is comparable to their non-migrant counterparts. As time goes by, their number of dependent children increases compared with their non-migrant counterparts, whose dependent children are now starting their own families at the place of origin.

However, poverty status, dependent children, and political commitment between migrants and non-migrants did not differ significantly after a period of over 15 years. The non-migrants were also affected by poverty, and this confirms Gibbons' (1984) finding that poverty incidence in Yan district is still widespread. The migrants have in fact become poorer for two basic reasons: first, the original farm size operated had been reduced to only about 3 acres, by the government authority. Second, they were still planting less than two crops a season (3 crops per two years) because the drainage and irrigation networks have just been reactivated, and the area was just developed into rice farmland. Land improvements have not taken place.

If they had been allowed to continue farming the original farm size of about 10 acres that they had initially colonized, they would not be

as poor as they are now. The government authority had to confiscate a large amount of their developed land in order to offer it to the organized rural-rural migrants sponsored by FELCRA and the state government. Thus, the migrants' hope of improving their standard of living fell short of their anticipation. Had it not been for the government's eviction exercise, they would be far better-off than they were at their place of origin.

The study found that migrants faced acute problems in starting their new life in their place of destination. Without any aid from government agencies, they manually developed the virgin swamp land into a cultivable piece of rice farmland. After enjoying a large farm size operation for about five to ten years, they had to relinquish part of their developed land involuntarily to the government authorities.

In cases where the relocation of agricultural plots affected only some of them, while others were evicted from their plots, antagonistic relationships prevailed among the migrants. Friction, which led to infighting, destroyed their solidarity in their new place of destination. As a result, they remained politically uncommitted, particularly when their attempt to join the ruling political party failed. Consequently, after a period of 15 years, the migrants' political commitment does not differ significantly with their non-migrant counterparts.

Conclusion

The study seems to be quite successful in identifying factors among the variables selected as the most predictive discriminant functions differentiating the migrants from their non-migrants counterparts.

There was also a clear delineation of the characteristics of the migrant and non-migrant rice peasant producers of Yan district in the Muda irrigation area.

From the univariate and multivariate statistical analyses, the study revealed that some of the variables were inconsistent, for the purpose of being migration determinants. Among these were the educational levels of attainment, perceived political participation and access to development accelerators.

As anticipated, social integration significantly differentiated the migrant from the non-migrant group. The migrants were found to be less socially integrated into their community of origin. This was one of the main reasons why they out-migrated from their community of origin in Yan district to the Trans-Perak IADP area. With this finding, the study revealed that social integration was a consistent migration determinant across societies.

However, the study failed to elicit as many factors as possible from the list of the selected variables that influenced social integration among the rice peasant producers, particularly among the non-migrants. This finding contradicts Goldscheider's (1971) proposition that variables such as age, educational and occupational status, and economic investments influence social integration among members of a given community. But, his hypothesis that social integration is inversely related to the decision to migrate was fully verified in the study.

An important finding revealed by the study was the lack of socio-

economic improvement, particularly among the migrants after a period of about 15 years, or ever since they left their community of origin. Their hope of improving their standard of living was shattered because of the eviction exercises executed by government authorities. They were still poor because they were not given the opportunity to solve their own poverty status by allowing them to continue operating their initial farm size developed earlier from the virgin swampland.

Thus, an attempt to improve their living standard through out-migration and colonization of undeveloped government land proved to be a failure in the lives of these peripatetic peasants. Their only hope of survival is the immediate ownership of the existing land that they were forced to leave by government authorities. In addition, recognition by the government authority and their complete integration into the larger community of Trans-Perak is vital for the success of this IADP approach to agricultural development in this area in particular, and in West Malaysia in general.

CHAPTER 8. SUMMARY, POLICY IMPLICATIONS, AND CONCLUSION

Summary

The problem

This micro-level migration study employed case analyses to verify the inconsistency status among some of the selected determinants of internal migration. Because of an overemphasis on the fully organized rural-rural migration flows manifested in the analyses of the FELDA resettlement participants, the study attempted to analyze those rice peasant producers who did not participate in this special rural population redistribution program.

Some of the previous studies analyzing the migration phenomenon focused on the migrants alone, while others examined potential movers and non-movers. This study directed its emphasis on the actual migrants and their non-migrant counterparts from the same district. In this approach, the nature and problems of spontaneous rural-rural migration could be comprehensively understood.

Since the research problem revolved around the question of the discrepancy of internal migration determinants, the application of discriminating behavior and social integration model was hoped to offer some explanations as to why some people move while others do not. Various characteristics and perceptions of the rice peasant producers were used to delineate the most predictive scores differentiating the migrant from the non-migrant groups. Their influence on social integration was also examined.

Method of investigation

The study relied on samples of migrant peasant producers from Yan district in the Muda area of the state of Kedah and their non-migrant counterparts. The selection of samples was guided by an earlier study undertaken between 1978 and 1980 by the Center for Policy Research, Universiti Sains Malaysia.

A random sample of 100 migrant peasant producers currently cultivating rice in the Trans-Perak IADP area was interviewed to ascertain their characteristics and perceptions about social integration, access to development accelerators, political participation, and kinship closeness. Another sample of 100 non-migrant peasant producers was also interviewed to ascertain the above information.

Discriminant analysis was used to identify the characteristics and perceptions that differentiate the two groups. The univariate analysis in this procedure verified the significant difference between the two groups in relation to specific variables. The multivariate analysis provided the delineation of variables that formed the most predictive elements determining the migration behavior among the rice peasant producers of West Malaysia.

The inconsistency of internal migration determinants was also thought to be explicable by focusing on the relationship between social integration and the decision to migrate. Therefore, a multiple regression analysis was employed to identify which variables influenced perceived social integration among the Malay rice peasant producers in West Malaysia.

Major findings

The major findings of this study can be summarized under the following specific headings parallel to the pertinent questions posed in the objective section:

- 1) The inconsistency and discriminant function coefficients of the selected migration determinants;
- 2) Factors influencing peasant producers' social integration into their community;
- 3) The socio-economic status changes among and between the migrant and the non-migrant groups;
- 4) The state of agricultural development and the promise of the National Agricultural Policy (NAP); and
- 5) Lessons that could be learned from the spontaneous rural-rural migration phenomenon in West Malaysia.

The inconsistency and discriminant function coefficients of the selected migration determinants

From the thirteen predictor variables representing the migration determinants, the study revealed that only perceived political participation, access to development accelerators, and educational levels of attainment were inconsistent migration determinants. Other variables such as perceived social integration and kinship closeness, age, dependent children, total family, farm size operated, poverty, land tenure and farm employment status, and political commitment were found to be consistent in both the univariate and multivariate analyses results.

Among the thirteen predictor variables selected to study the migration behavior among the Malay rice peasant producers in West Malaysia, political commitment, perceived access to development

accelerators, perceived social integration, perceived political participation, and poverty status were among the most predictive determinants of migration behavior. However, because of the irregularity of the perceived access to development accelerators and perceived political participation, the best predictive determinants of migration behavior among the Malay rice peasant producers in West Malaysia were their political commitment, perceived kinship closeness, perceived social integration and poverty status.

The study, on the whole, was able to verify only a few inconsistent internal migration determinants. Despite the verification of the consistency of the majority of the selected determinants of internal migration, the study was successful in verifying that social integration was indeed inversely related to the decision to migrate. In addition, social integration among the Malay rice peasant producers was among the most predictive elements of migration behavior.

Factors influencing peasant producers' social integration into their community Utilizing the discriminating behavior and social integration model in the study served two vital purposes. The first was to identify predictor variables that formed the most predictive elements for migration behavior. The second purpose was to elicit factors among the selected predictor variables that influenced rice peasant producers' perceived social integration into their community of origin. Should there be any inconsistent determinants of internal migration explicitly revealed, did they influence rice peasant producers' social integration into their community?

From the twelve independent variables selected to verify this relationship, only their perceived political participation, perceived access to development accelerators, and political commitment were found related to perceived social integration among the migrant rice peasant producers. However, the same three factors were found to have significantly contributed to perceived social integration while unfavorable farm employment status had significantly contributed to social disintegration among the migrants.

For the non-migrant group, perceived access to development accelerators and kinship closeness were found to be significantly related to their perceived social integration into their community. But, there was only one variable that had significantly contributed to their perceived social integration into their community. That variable was their perceived access to development accelerators.

Thus, the study had not been very successful in verifying the contributions of the selected independent variables to the perceived social integration, particularly among the non-migrant peasant producers of Yan district. However, the study significantly revealed that it was their perceived social integration that inhibited them from migrating out of their community of origin.

Besides these issues, the study also revealed that political commitment among the non-migrants also played a very significant role in influencing them to stay behind. As far as poverty status was concerned, despite the fact that both groups were poor, the migrants were the poorest.

The socio-economic status changes among and between the migrant and the non-migrant groups

From the study, it seemed that the migrants should have done well, particularly with respect to economic achievement. However, the eviction exercise reduced their size of farm, and thus, they were unable to improve their standard of living. Before their migration, they were already living under poverty status. At their place of destination, their poverty status had virtually deteriorated.

On the other hand, their non-migrant counterparts also suffered a slight deterioration with respect to their poverty status. One explanation could be that the official per capita poverty line income has more than doubled since 1970. Thus, from an income approach, this change would surely affect their overall poverty status. Another explanation is inherent in their declining farm size operation due to retirement or acquisition of farmland by landlords. This would definitely affect their total income.

Both migrants and non-migrants maintained their political commitment status since the migration process. The migrants were not committed to any political parties at the place of destination, except for a few who had been committed to these parties even at their place of origin. As far as social integration was concerned, non-migrants still perceived themselves to be socially integrated into their community, while the migrants perceived that their social integration had improved at their place of destination. In addition, the migrants' dependent children have increased very substantially, and this would affect their

poverty status.

The state of agricultural development and the promise of the National Agricultural Policy (NAP) The structure of Malaysian agriculture, particularly with regard to peasant agriculture, requires a massive effort for improvement. The persistent inequality in farm size distribution and the polarization of land ownership within the rice sub-sector are just two of the many causes of rural poverty in the country.

An integrated approach in agricultural development, which relied on strategies such as infrastructural, institutional and organizational and human resource development produced different results in different regions. However, the solutions for alleviating the problem of poverty among the Malaysian peasantry, in particular the rice peasant producers, would still require an optimum combination of various existing alternatives. For example, using a combination of land reform, population redistribution, diversification of economic activities within a specific region, and vocational training programs is just one possible method for solving the persistence of poverty.

While the National Agricultural Policy seems to reassure that past policies will be supported and implemented, the preservation of existing methods in the selection of participants for rural resettlement projects needs to be modified. The criterion of landlessness must be thoroughly examined and only those who really own no land should be selected, rather than those with some land. It may sound irrational to politicians, but, as long as those who are not politically committed are neglected, the poverty problem will remain as the most pressing problem

in the country. From this and other studies, those who are politically uncommitted are the ones who have been left behind in the various aspects of economic development. Needless to say, the opposition has always paved the way for their own disappointment.

The move to turn small rice farms into big corporate rice farms or "padi" estates as recommend by the NAP, will only benefit those with some rice farmland, but not the landless. That the landless will definitely be selected to join the rural resettlement projects is still questionable in view of their political commitment. Therefore, the promise of the NAP can be considered as an overall promise to improve the nature of the existing status of the Malaysian agriculture. The promise to improve the lot of specific groups is still an issue to be resolved.

Lessons that could be learned from the spontaneous rural-rural migration phenomenon in West Malaysia What caused the Malay rice peasant producers to outmigrate and colonize undeveloped government land illegally has been elicited by the study. Besides not being socially integrated into their community of origin, their poverty status also triggered them to move elsewhere. Their initial occupation of government land had indeed provided a potential for solving this excruciating problem. But, after the eviction exercise and the acquisition of part of their new farmland, they have been virtually returned to their initial poverty status.

Besides being landless, spontaneous rural-rural migrants were also politically uncommitted. Most of them failed to join as participants in

the FELDA or FELCRA rural resettlement projects. By being involved in this migration flowstream, their hope of acquiring land for cultivation of rice stemmed from their own understanding of how they could solve their own problems. But the step taken to colonize government land backfired on them. They are now, in fact, living in a worse situation than they had been in their community of origin. But they are still happy with what they have now because their ability to adjust to the new environment has given them new hope for survival.

The study's contribution to the general theory of sociology

The discriminating behavior and social integration model employed has indicated the ability to differentiate between the characteristics and perceptions of both migrants and non-migrants. The model is able to provide explanations of why some people move, while others do not, by indicating that certain status variables such as poverty, perceived social integration, dependent children, farm employment and land tenure status are part of the predictive components of migration behavior.

Within a given societal system, there exists structural and cultural elements that tend to bind members cohesively in terms of their strong social integration to their community. However, through the processes of social differentiation and stratification, some members will gain a higher status position than others, while among some, different roles are played in accordance with their ability, capacity and interest.

From this structural dimension, members of a social system will

evaluate their contribution and worth within their community. Since the natural tendency among human beings is to strive for upward social mobility within their communities, failure through comparative evaluation, to achieve such a status recognition will trigger their desire to find the recognition elsewhere. Hoffmann-Nowotny (1981) asserts that the geographical mobility among members of a societal system persists because certain anomic tensions that stem from dissatisfaction with their prevailing social status urge them to find satisfaction somewhere else. The recognition could be achieved by either influencing the new social system to upgrade their existing ability, skill or socio-economic status, or by striving to compete with members of the new community in achieving the highest social status.

Poverty status, farm employment status, and land tenure status among the migrants have placed them, in lower social stratification categories in their community of origin. As a result, their social-capillarity cannot push them upward although burdens such as a large number of dependent children, may not be one of the causes of low social capillarity. But these status variables group them within a class of people who perceived themselves to be less socially integrated within their community of origin.

Some of the non-migrants have achieved a social status that places them above the poverty status, and entitles them to certain useful facilities and services that make their life in the community of origin a splendid one. Thus, there is no reason for them to migrate elsewhere. However, since age does not contribute to their perceived social

integration, theoretically, the study confirmed that the transformation of a traditional society into a modern one, does not reflect the importance of the leadership roles played by the elderly in village communities. This concurs with earlier findings by Ali (1975) among the Malay peasant societies in the rural settings of West Malaysia.

It is within this structural dimension that the study has offered some limited contributions to the general theory of sociology. The persistent inequality of access to a certain social status that prevents a member of a community from moving into a higher stratum causes him to search for another community where such an achievement could be attained. The improvement in the migrants' perceived social integration into their new community illustrates this point. While conditions in their community of origin have precluded some of them from playing important roles in community development, by migrating to the new community, such roles are more easily available.

Goldscheider's (1971) argument that social integration offers an explanation of why some people move, immaterial of their ages, occupational and educational status, is supported. What is important here is that the social structure and cultural elements within a social system influences the members' search for upward social mobility through geographical mobility. From the structural approach, the lack of opportunities to achieve certain status role within their community engender them to search for a community where such roles are available. However, such roles are only available for those who possess certain characteristics deemed as worthwhile by members of the community of

origin.

In summary, migration as a social process and social behavior illustrated by the study offers evidence that economic factors are not the only trigger for migration. Rather, a combination of economic, social, political, and demographic attributes of individuals foster their evaluative mechanism to decide to migrate. As such, the study's contribution to the general sociological theory of migration can be observed through the prevalence of social integration as an important basis for the migration decision-making process. From the general sociological theory, the study has shown that social structure and its elements have indeed played a very important role in community members' upward social mobility.

Limitations and Suggestions for Future Research

Generally, the findings of the study indicate that a sociological explanation of the migration phenomenon can be considered a valid approach. It suggests that economic factors are not alone in explaining the decision to migrate. But, with the use of a small sample from a single district, it is difficult to generalize the finds for the entire Malay rice peasant producers in the whole country.

While the study attempts to maintain the definition of migration behavior as the actual decision to move, its dichotomous measure inhibits the use of other statistical procedures, such as ordinary multiple regression and a causal explanation of the phenomenon. Hence, the predictive power of the model cannot be empirically tested through the causal relationships. It could be done if migration behavior was

measured in terms of a continuous measure inherent in the intensity of the behavior itself. In other words, the number of moves made by the migrants prior to their final destination can provide the answer to the lack of a continuous measure of actual migration.

This aspect is an important point to be considered for further research in the field. Naturally, when an individual has made a decision to move, dissatisfaction with a place of destination will motivate him to go on and look for another site until he finds the best place of destination for him and his family. The more the number of moves made, the greater the intensity of his migration behavior.

This study has employed a number of indexes to determine the respondents' perceptions about some relevant aspects of their social life. Because of the few number of statements used to aggregate the index score, their perceptions may not be fully measured by the few statements. By including as many statements as possible in building these indexes, future research in this field may be able to strengthen the existing findings of this study.

In addition, when we talk about having a larger sample size, the idea of having the sample represent various communities in the country is very important. As we have learned from the literature review, spontaneous rural-rural migrants are found scattered in various areas of destination throughout the country. Efforts must be made in future research to include representatives from all these locations in the overall sample. By including all the locations where the phenomenon has persisted in the sample size, the generalization of the findings will be

measured in terms of a continuous measure inherent in the intensity of the behavior itself. In other words, the number of moves made by the migrants prior to their final destination can provide the answer to the lack of a continuous measure of actual migration.

This aspect is an important point to be considered for further research in the field. Naturally, when an individual has made a decision to move, dissatisfaction with a place of destination will motivate him to go on and look for another site until he finds the best place of destination for him and his family. The more the number of moves made, the greater the intensity of his migration behavior.

This study has employed a number of indexes to determine the respondents' perceptions about some relevant aspects of their social life. Because of the few number of statements used to aggregate the index score, their perceptions may not be fully measured by the few statements. By including as many statements as possible in building these indexes, future research in this field may be able to strengthen the existing findings of this study.

In addition, when we talk about having a larger sample size, the idea of having the sample represent various communities in the country is very important. As we have learned from the literature review, spontaneous rural-rural migrants are found scattered in various areas of destination throughout the country. Efforts must be made in future research to include representatives from all these locations in the overall sample. By including all the locations where the phenomenon has persisted in the sample size, the generalization of the findings will be

first generation rural-urban migration. The problem will then recur as the second generation is unable to secure employment within these resettlement projects.

Another source (Peacock, 1979) considered it a very costly project that will affect the overall national budget, and increase the international debt. Because of the slow pace of new land development, not enough participants will be redistributed to the settlement areas. As a result, those who failed to be selected, and are pushed out of their villages of origins, will attempt to colonize the existing undeveloped government land. Moreover, if the rural population does not possess any urban-oriented skills to compete for jobs and are educationally disadvantaged, colonization of virgin land will possibly be their only choice.

To prevent this phenomenon from happening in the future requires the land offices to monitor the colonization of potential agricultural land by the people. However, in areas where such activity has already been long underway, the government should apply the concept of accommodation parallel to those being carried out in the urban squatter areas. Instead of evicting them and causing more problem, the government could provide them with the basic social amenities and legalize their colonization through land alienation, and thus inhibit them from migrating again to another rural area or to an urban center.

The cost of such a resettlement approach would virtually be cheaper than the existing planned and fully supported projects. The cost of land development and the provision of basic social amenities would be

minimum. Likewise, the people involved would not be burdened with the repayment of development cost, as is required by those successful participants in the organized resettlement projects.

Naturally, people will move toward change if they really feel that they need this change. Since their migration and colonization of these agricultural areas stemmed out of a need for land, their turnover would be negligible. In various organized resettlement projects, participant turnover still prevails although it is not high. This suggests that voluntary migration is as important as migration with the induced overtones.

From the findings of the study, rice cultivation can be considered an occupation which is less remunerative unless the size of farm operated is larger than the majority of rice farms in the country. Even with the existing input and cash subsidies provided to rice cultivators, the unequal distribution of farm size operation and land ownership will not guarantee that the subsidies can alleviate their incidence of poverty.

Some sort of land reform will have to be formulated. For instance, the money spent on input and cash subsidies could have been used to acquire land held in surplus by the landlords in exchange for government securities or bonds. This extra land could be redistributed to the landless with the condition that they need to pay a certain sum of money for the land on an installment basis. Other conditions pertinent to the issue of subdivision and fragmentation of these farms can be arranged between the government and the beneficiaries of the scheme. Indirectly,

a standard size of farm could be maintained within these rice growing regions.

Since one of the fundamental strategies under the NAP is the consolidation of small rice farms into a big corporate farm, only those with farmland can be rewarded by such a project. But, if the above reform can be implemented, and each cultivator is allowed to join these numerous corporate farms in the country, the landless would also have the opportunity to gain from the project.

Having investors organizing big rice estates without the shareholders input in the planning and managing of these farms would surely provide an avenue for the investors to make huge profits at the expense of the small farmers. Therefore, while the project calls for privatization of the existing structure of Malaysian rice agriculture, government monitoring is still required to ensure that capitalist farming will not penetrate Malaysian agriculture at the expense of the rural peasantry.

If this happened, the incidence of poverty among the agricultural household in general, and rice cultivators in particular, may not be resolved. As the study reaffirms that farm size operated, land tenure and farm employment status are among the causes of rural poverty among this group of peasants, the solution of consolidated farms has to be properly planned and implemented.

The study has also revealed that social integration is an important element in migration behavior among the Malay rice peasant producers in the country. This factor can also be used to ensure that migrants at

various agricultural settlements, through planned or spontaneous efforts, can reestablish a cohesive community. If kinship closeness, political commitment and participation, and certain types of development accelerators can influence their integration into the new community, the promotion of these activities and the provision of such facilities must be encouraged. While such an activity may not benefit the government in the short run, in the long run, some of the problems that require full government efforts in terms of manpower and money to solve, can be avoided, if these communities enjoy the highest level of social integration, and are prepared to accept whatever changes that could improve and maintain their living standard.

Conclusion

In conclusion, the study has revealed the major causes of internal migration, in particular, the spontaneous rural-rural migration phenomenon in West Malaysia. Besides attempting to contribute to the overall explanation of why some people move while others do not, the study has also provided a comprehensive look at the socio-economic problems faced by peasant producers in a country where agriculture is still a major contributing factor to the overall economic development of the country. As such, issues pertinent to the structure of agriculture and the redistribution of excess rural population are becoming major concerns for the country when it attempts to resolve the problems of poverty in the agricultural sector particularly, and in all other sectors as well.

From the sociological perspective, the development of the Malaysian

agriculture must as well answer the questions of how agricultural egalitarianism could be achieved, what are the other alternatives that are available to ensure that most of the landless be included in the existing population redistribution program, and how can the production of primary goods, in particular domestically consumable products, be more lucrative. From the whole study, there is an unequivocal truth that when people realize that they really need to change their life toward progress and improvement, they will go all out to achieve such a positive change.

BIBLIOGRAPHY

- Abdullah, Ahmad Nazri
1985 Melayu dan Tanah: Tumpuan khusus kepada Tanah Simpanan Melayu. PJ, Selangor: Media Intelek Sdn. Berhad.
- Abdullah, Hairi
1976 "Rural-urban migration: A case study in Bandar Maharani." Pp. 140-158 in H. M. Dahlan (ed.), The Nascent Malaysian Society. Kuala Lumpur: Jabatan Sosiologi dan Anthropology, Universiti Kebangsaan Malaysia.
- Abdullah, Mohd. Shadli
1978 "The relationship of the kinship system to land tenure: A case study of Kampong Gelung Rambai." An unpublished Masters thesis, Universiti Sains Malaysia, Penang, West Malaysia.
- Abdul Karim, Hasan
1985 "PSRM cabar Anwar bincang Dasar Pertanian." Watan (19-22 March):3.
- Abeysekera, Dayalal S. D. S.
1984 "Rural to rural migration in Sri Lanka." Pp. 109-208 in Calvin Goldscheider (ed.), Rural Migration in Developing Nations: Comparative studies of Korea, Sri Lanka, and Mali. Boulder: Westview Press.
- Alatas, S. Husin
1973 "Religion and modernization in Southeast Asia." Pp. 153-169 in Hans-Dieter Evers (ed.), Modernization in Southeast Asia. Kuala Lumpur: Oxford University Press.
- Alavi, Hamza
1975 "India and the colonial mode of production." Economic and Political Weekly 10 (33,34,35):1235-1262.
- Ali, S. Husin
1975 Malay Peasant Society and Leadership. Kuala Lumpur: Oxford University Press.
- 1979 Apa Erti Pembangunan. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- 1981 The Malays: Their problems and future. Kuala Lumpur: Heinemann Asia Ltd.

- Amin, Samir
1976 Unequal Development. New York: Monthly Review Press.
- Arief, Sritua
1982 "Regional disparities in Malaysia." Social Indicators Research 11 (3):259-267.
- Arndt, H. W.
1983 "Transmigration: Achievements, problems, prospects." Bulletin of Indonesian Economic Studies 14 (3):50-73.
- Arope, Ani and K. C. Lai
1971 Towards Optimal Size of Rice Farms. MARDI Agricultural Economics Bulletin 1 (2).
- Asian Development Bank
1971 Southeast Asia's Economy in the 1970s. New York: Praeger Publishers.
- Bach, Robert L. and J. Smith
1977 "Community satisfaction, expectation of moving, and migration." Demography 14:147-167.
- Baharin T. S. and P. D. A. Perera
1977 FELDA: 21 Years of Land Development. Kuala Lumpur: Felda Printers.
- Baharuddin, Shamsul Amri
1979 "The development of the underdevelopment of the Malay peasantry." Journal of Contemporary Asia 9 (4):434-454.

1983 "The politics of poverty eradication: The implementation of development project in Malaysian district." Pacific Affairs 55 (5):455-494.
- Bailey, Corner
1975 Broker, Mediator, Patron and Kinsman: An historial analysis of key leadership roles in a rural Malaysian district. Athens: Ohio University Press.

1983 Sociology of Production in Rural Malay Society. Kuala Lumpur: Oxford University Press.
- Banks, David J.
1972 "Changing kinship in North Malaya." American Anthropologist 74 (5):1254-1275.
- Bastin, John and R. W. Winks
1966 Malaysia: Selected Historial Readings. Kuala Lumpur: Oxford University Press.

- Bell, Clive, P. Hazel and R. Slade
1982 Project Evaluation in Regional Perspective: A Study of an irrigation project in Northwest Malaysia. Baltimore: Johns Hopkins University Press.
- Berita Harian
1985 "Dasar Beri Tanah Akan Di Kaji Semula: Untuk beri faedah kepada rakyat." Berita Harian, Februrari 16 (Sabtu):9.
- Bertrand, Alvin L.
1972 Social Organization: A general systems and role theory perspective. Philadelphia: F. A. Davis Company.
- Besher, J. M. and E. Nishura
1961 "A theory of internal migration differentials." Social Forces 39:214-218.
- Blalock, H. M.
1969 Theory Construction from Verbal to Mathematical Formulation. Englewood-Cliff, New Jersey: Prentice Hall.
- Blanco, C.
1963 "The determinants of interstate population movements." Journal of Regional Science 5:77-84.
- Blau, Peter M.
1977 Inequality and Heterogeneity: A Primitive Theory of Social Structure. New York: The Free Press.
- Bogue, Donald J.
1959 Population of the United States. Glencoe, Illincis: Free Press.
- Caldwell, J. C.
1970 African Rural-Urban Migration. New York: Columbia University Press.
- Caldwell, Malcolm
1977 "The British 'forward movement' 1874-1914." Pp. 13-37 in Mohd. Amin and M. Caldwell (eds.), Malaya: The Making of a Neo-Colony. Nottingham: Spokesman Book.
- Campbell, Rex R. and Lorraine Garkovich
1984 "Turnaround migration as an episode of collective behavior." Rural Sociology 49 (1):89-105.

- Carino, Benjamin V.
1979 "Migration and regional development: The Bicol region." Pp. 251-158 in Robin J. Pryor (ed.), Migration and Development in South-East Asia: A Demographic Perspective. Kuala Lumpur: Oxford University Press.
- Chan, Paul
1983 "Population distribution and development strategies in Peninsular Malaysia." Pp. 27-28 in A. S. Oberai (ed.), State Policies and Internal Migration: Studies in Market and Planned Economies. New York: St. Martin's Press.
- Chander, R.
1977 1970 General Report -- Population Census of Malaysia, Volume 1. Kuala Lumpur: Department of Statistics.
- Chang, H. C. and Brian Pendleton
1986 "Migration as a demographic response: The age differentials." Regional Science Perspective 16 (1) forthcoming.
- Choi, Jin Ho
1984 "Urban to rural migration in Korea." Pp. 21-108 in Calvin Goldscheider (ed.), Rural Migration in Developing Nations: Comparative Studies of Korea, Sri Lanka and Mali. Boulder: Westview Press.
- Clad, James
1983 "Agricultural policies (caught NApping): The problem of slow growth in Malaysia, underlined by the World Bank, is at last being addressed. Far Eastern Economic Review, November 22 (1983):76-78.
- Connel, J., B. Dasgupta, R. Laishley, and M. Lipton
1976 Migration from Rural Areas: The Evidence from Village Studies. Delhi: Oxford University Press.
- Cooley, Charles H.
1902 Human Nature and the Social Orders. New York: Scribner.
- Corner, Lorraine
1980 "Mobility in the context of traditional family and social relationships: Linkages, reciprocity and flow of remittances." Seminar paper series, Development Studies Center for Population Mobility and Development, School of Economics and Financial Studies, Macquarie University, Australia.

- Das, K.
1982 "Malaysia -- The faithful divided." *Far Eastern Economic Review*, August 27 (1982):18.
- 1983 "A shift in the balance: Malaysia's 1980 Census puts the population at 13.7 million, with more than half of them Malays." *Far Eastern Economic Review*, June 2(1983):42-43.
- De Jong, G. F. and James T. Fawcett
1981 "Motivation for migration: An assessment and value-expectancy research model." Pp. 13-58 in G. F. De Jong and R. W. Gardner (eds.), *Migration Decision Making: Multidisciplinary Approaches to Microlevel Studies in Developed and Developing Countries*. New York: Pergamon Press.
- De Jong, G. F. and Robert W. Gardner (eds.)
1981 *Migration Decision Making: Multidisciplinary Approaches to Microlevel Studies in Developed and Developing Countries*. New York: Pergamon Press.
- De Koninck, Rudolph
1976 "The integration of the peasantry: Examples from Malaysia and Indonesia." *Pacific Affairs* 5 (2):265-293.
- Drakakis-Smith, David W.
1979 "Development Planning: Urban planning -- the challenge of an alternative urbanism in Southeast Asia." Pp. 286-294 in Robin J. Pryor (ed.), *Migration and Development in South-East Asia: A Demographic Perspective*. Kuala Lumpur: Oxford University Press.
- Ellingstad, Vernon and Norman W. Heimstra
1974 *Method in the Study of Human Behavior*. Monterey, California: Wadsworth Publishing Company Inc.
- Fernandez II, C. A.
1975 "Adoptive process and development policies in a frontier resettlement community." Pp. 217-234 in John F. Kanter and Lee McCaffrey (eds.), *Population and Development in Southeast Asia*. Lexington: Lexington Book.
- Findley, Sally
1977 *Planning for Internal Migration: A Review of Issues and Policies in Developing Countries*. Washington, D.C.: U.S. Government Printing Office.
- Firth, Raymond
1946 *Malay Fishermen: Their Peasant Economy*. London: Kegan Paul Company.

- Firth, Rosemary
1943 Housekeeping Among Malay Peasants. Monograph of Social Anthropology No. 7. London School of Economics and Political Science.
- Fishbein, Martin and Icez Ajzen
1975 Belief, Attitude, Intention and Behavior. Reading, Massachusetts: Addison-Wesley Publishing Company.
- Fisher, Ronald A.
1936 "The use of multiple measurements in taxonomic problems." Annals of Eugenics 7:179-188.
- Fisk, E. K.
1964 Studies in the Rural Economies of Southeast Asia. London: Eastern University Press.
- Frank, Andre Gunder
1967 Capitalism and Underdevelopment in Latin America. New York: Monthly Review Press.
- Fried, Marc and Peggy Gleicher
1961 "Some sources of residential satisfaction in an urban slum." Journal of the American Institute Planners 27:305-315.
- Fujimoto, Akimi
1980 "Land tenure, rice production and income sharing among Malay peasants: A study of four villages." An unpublished Ph.D. dissertation, Flinders University of South Australia.
- Funston, N. J.
1980 Malay Politics in Malaysia: A Study of UMNO and PAS. Kuala Lumpur: Heinemann Asia Ltd.
- Gale, Stephen
1973 "Explanatory theory and models of migration." Economic Geography 49 (3):257-274.
- Gallin, Bernard and Rita S. Gallin
1980 "The integration of village migrants into urban society: The case of Taipei, Taiwan." Pp. 152-176 in Robert N. Thomas and John M. Hunter (eds.), Internal Migration Systems in the Developing World with Special Reference to Latin America. Boston: G. K. Hall and Company.

- Geertz, Clifford
1963 Agricultural Involution: The Process of Ecological Change in Indonesia. Berkeley: University of California Press.
- Gibbons, David S.
1984 Paddy Poverty and Public Policy: A Preliminary Report on Poverty in the Muda Irrigation Area 1972 and 1982. Monography series No. 7, Center for Policy Research, Universiti Sains Malaysia, Penang, Malaysia.
- Gibbons, David S., Rudolph De Koninck and Ibrahim Hassan
1980 Agricultural Modernization, Poverty, and Inequality: The Distributional Impact of the Green Revolution in Regions of Malaysia and Indonesia. Farnborough, Hants: Gower Press.
- Gibbons, David S., Lim Teck Ghee and Shukur Kassim
1981 Land Tenure in the Muda Irrigation Area: Final Report. Center for Policy Research, Universiti Sains Malaysia, Penang, Malaysia.
- Glasgow, Nina and A. J. Sofranko
1980 "Migrant adjustment and integration in the new residence." Pp. 87-104 in A. J. Sofranko and J. D. Williams (eds.), Rebirth of Rural America: Rural migration in the Midwest. Ames, Iowa: NCRCRD.
- Goldscheider, Calvin
1971 Population, Modernization and Social Structure. Boston: Little Brown and Company.
- 1984 Rural Migration in Developing Nations: Comparative Studies of Korea, Sri Lanka and Mali. Boulder: Westview Press.
- Gullick, J. M.
1963 Malaya. New York: Praeger Publishers.
- Haji Abdul Rahman, Haji Mohamad
1984 "New towns in Malaysia: Problems, failures and achievements." Pp. 313-345 in Thomas L. Blair (ed.), Urban Innovation Abroad: Problem cities in search of solutions. New York: Plenum Press.

- Haji Bakar, Mohd. Isa, Haron Din, Lim Teck Ghee, and Mansor Haji Othman
 1979 "Local level development: A case study of the local question." Paper presented at the International Symposium of Local Level Development Alternatives, Universiti Sains Malaysia, Penang, Malaysia; 3rd-7th September, 1979.
- Haji Bakar, Mohd. Isa, Haron Din, Lim Teck Ghee, and Mansor Haji Othman
 1980 Seberang Perak Rehabilitation Project: Final Report. Center for Policy Research, Universiti Sains Malaysia, Penang, West Malaysia.
- Haji Omar, Afifuddin
 1972 A Study of Leadership Pattern, Activities and Behavior among Leaders of Farmers' Association in The Muda Scheme. MADA Publication No. 17.
- 1973 Some Aspects of Socio-Economic Value System of the Muda Rice Farmers in Developmental Perspective. MADA Publication No. 24.
- 1978 Peasants, Institutions, and Development in Malaysia: The Political Economy of Development in the Muda Region. MADA Publication No. 36.
- Haji Othman, Mansor
 1978 "Paddy land ownership and politics in Kedah." An unpublished Masters thesis, Universiti Sains Malaysia, Penang, Malaysia.
- Halim, Fatimah
 1980 "Differentiation of the peasantry: A study of the rural communities in West Malaysia." *Journal of Contemporary Asia* 10 (4):400-422.
- 1981 "Rural labor force and industrial conflict in West Malaysia." *Journal of Contemporary Asia* 11 (3):271-296.
- Harbison, Sarah F.
 1981 "Family structure and family strategy in migration decision making." Pp. 225-251 in G. F. De Jong and R. W. Gardner (eds.), *Migration Decision Making: Multidisciplinary Approaches to Microlevel Studies in Developed and Developing Countries*. New York: Pergamon Press.
- Hardjono, J. M.
 1977 *Transmigration in Indonesia*. Kuala Lumpur: Oxford University Press.

- Hartmann, G. and James Boyce
1977 *Needless Hunger: Voices from a Bangladesh Village.* San Francisco: Institute for Food and Development Policy.
- Hashim, Aladin
1979 "Land development under FELDA: Some socio-economic aspects." Pp. 63-79 in BAR Mokhzani (ed.), *Rural Development in Southeast Asia.* Delhi: Vikas Publishing House Private Ltd.
- Havens, Eugene A.
1982 "The changing structure of United States agriculture." Pp. 308-316 in Don A. Dillman and Daryl J. Hobbs (eds.), *Rural Society in the U.S.: Issues for the 1980s.* Boulder: Westview Press.
- Heffernan, William D.
1982 "Structure of agriculture and quality of life in rural communities." Pp. 337-346 in Don A. Dillman and Daryl J. Hobbs (eds.), *Rural Society in the U.S.: Issues for the 1980s.* Boulder: Westview Press.
- Hennigh, Lawrence
1978 "The good life and the taxpayers' revolt." *Rural Sociology* 43 (1):178-190.
- Hoffmann-Nowotny, H. J.
1981 "A sociological approach toward a general theory of migration." Pp. 64-83 in M. M. Kritz, C. B. Keely, and S. M. Thomas (eds.), *Global Trends in Migration.* New York: New York Inc.
- Hollingsworth, T. H.
1970 *Migration.* Occasional paper No. 12. Edinburgh: Oliver and Boyd.
- Horii, Kenzo
1981 *Rice Economy and Land Tenure in West Malaysia: A Comparative Study of Eight Villages.* Tokyo: Institute of Developing Economies.
- Hutchinson, B.
1963 "The migrant population of urban Brazil." *America Latina* 6:41-71.
- Ibrahim, Zawawi
1983 "Tani, proletar Melayu dan amalan ideologi kelas." *Kajian Malaysia* 1 (1):1-37.

- Jamil, Mohamad
1972 Area Development: Integrated Approach to Agricultural Development. Ministry of Agriculture, Malaysia. Mimeograph.
- Jegatheesan, S.
1977 The Green Revolution and the Muda Irrigation Scheme: An Analysis of its impact on the size, structure and distribution of rice farmers income. MADA Publication No. 30.
- Johnstone, Michael
1983 "Urban squatting and migration in Peninsular Malaysia." International Migration Review 17 (2):291-322.
- Jones, Gavin
1978 Social Science Research on Population and Development in Southeast Asia: A Review and Research for Directions. Mexico City: IRG, El Colegio de Mexico.
- Judd, Philip
1984 "Training and visit system in Southeast Asia." Pp. 105-114 in S. M. Yassin, I. Beavers, and I. Mamat (eds.), Improving Extension Strategies for Rural Development. Serdang, Malaysia: Universiti Pertanian Malaysia Press.
- Kachigan, Sam Kash
1982 Multivariate Statistical Analysis: A Conceptual Introduction. New York: Radius Press.
- Kaplan, P. F., Z. Haq, S. Narayanan, and J. Taylor
1977 Potential Migration Study for the Pahang Tenggara Regions. Malaysia: Development Authority for Pahang Tenggara.
- Kinloch, G. C.
1977 Sociological Theory. New York: McGraw-Hill Company.
- Kratoska, Paul H.
1985 "The peripatetic peasant and land tenure in British Malaya." Journal of Southeast Asian Studies 16 (1):16-45.
- Kuchiba, Masuo, Y. Tsubouchi, and M. Maeda
1979 Three Malay Villages: A sociology of paddy growers in West Malaysia. Translated by Peter and Stephanie Hawkes. Honolulu: The University Press of Hawaii.

- Lai, K. C.
1977 "Income distribution among farm households in the Muda irrigation scheme: A developmental perspective." An unpublished Ph.D. dissertation, Wye College, University of London.
- Larson, Calvin J.
1973 Major Themes in Sociological Theory. New York: McKay.
- Lasker, Bruno
1945 Asia on the Move: Population Pressure, Migration and Resettlement in Eastern Asia Under the Influence of Want and War. New York: Henry Holt and Company.
- Lee, Everett S.
1966 "A Theory of Migration." Demography 3:47-57.
- Lenin, V. I.
1977 The Development of Capitalism in Russia. Moscow: Progress Publishers.
- Lim, Chong Yah
1967 Economic Development of Modern Malaya. Kuala Lumpur: Oxford University Press.
- Lim, Lin Lean
1983 Population and Development: Theory and Empirical Evidence: The Malaysian Case. PJ, Selangor: International Book Service.
- Lim, Mah Hui and W. Canak
1981 "The political economy of state policies in Malaysia." Journal of Contemporary Asia 11 (2):208-224.
- Lim, Teck Ghee
1976 Origins of a Colonial Economy: Land and Agriculture in Perak 1874-1897. Penang: Universiti Sains Malaysia Press.

1977 Peasants and their Agricultural Economy in Colonial Malaya 1874-1941. Kuala Lumpur: Oxford University Press.
- Linton, Ralph
1936 The Study of Man: An Introduction. London: D. Appleton-Century Company.
- Lomnitz, Larissa
1976 "An ecological model for migration studies." New Approaches to the Study of Migration 62:131-146.

- Long, L. H.
1973 "New estimates of migration expectancy in the U.S."
Journal of American Statistical Association 68:37-43.
- Loomis, C. P.
1962 Social Systems: Essays on their Persistence and Change.
New York: D. Van Nostrand Company Inc.
- MacAndrew, Collin and Kazumi Yamamoto
1975 "Induced and voluntary migration in Malaysia: The
Federal Land Development Authority role in migration
since 1957." Southeast Asian Journal of Social Sciences
3 (2):73-91.
- MADA
1980 Rancangan Pengairan Muda: 9 Tahun Usia -- 1970-1978.
Alor Setar, Malaysia: Percetakan Siaran Sdn. Bhd.
- Malaysia
1971a 1970 Population and Housing Census of Malaysia -- Field
Count Summary. Kuala Lumpur: Department of Statistics,
Malaysia.
- 1971b Second Malaysia Plan -- 1971-1975. Kuala Lumpur:
Government Printers.
- 1976 Third Malaysia Plan -- 1976-1980. Kuala Lumpur:
Government Printers.
- 1981 Fourth Malaysia Plan -- 1981-1985. Kuala Lumpur:
Government Printers.
- 1984 Fourth Malaysia Plan -- 1981-1985: Mid-Term Review.
Kuala Lumpur: Government Printers.
- Mangahas, Mahar
1983 "Measurement of poverty and equity: Some Asian social
indicators experience." Social Indicators Research 13
(3):253-279.
- Mangalam, J. J.
1968 Human Migration: A Guide to Migration Literature in
English -- 1955-1962. Lexington: University of Kentucky
Press.
- Mangalam, J. J. and H. K. Schwarzweller
1970 "Some theoretical guidelines toward a sociology of
migration." International Migration Review 4:5-20.

- Maxwell, W. E.
1884 "The laws and customs of the Malays with reference to the tenure of land." *Journal of the Straits Branch of the Royal Asiatic Society* 13:75-220.
- McGee, T. G.
1975 "Malay migration to Kuala Lumpur." Pp. 148-178 in B. M. Du Toit and H. I. Safa (eds.), *Migration and Urbanization*. The Hague. Mouton Press.
- Means, Gordon P.
1970 *Malaysian Politics*. London: University of London Press.
- Mellor, John W.
1976 *The New Economic Growth: A Strategy for India and the Developing World*. Ithaca: Cornell University Press.
- Miller, A. R.
1966 "Migration differentials in labor force participation." *Demography* 3:58-68.
- Mills, Lennox A.
1942 *British Rule in Eastern Asia: A Study of Contemporary Government and Economic Development in British Malaya and Hong Kong*. New York: Atheneum Publishers, Inc.
- Ministry of Agriculture
1967 *Farm Economic Survey of the Muda Project, 1966*. Kuala Lumpur: Ministry of Agriculture and Cooperatives.
- 1982 *Integrated Agricultural Development Programme*. Kuala Lumpur: Ministry of Agriculture. Mimeograph.
- 1983 *Integrated Area Development Programme*. Kuala Lumpur: Ministry of Agriculture. Mimeograph.
- 1984 *National Agricultural Policy (NAP)*. Kuala Lumpur: The Cabinet Committee on NAP. Kuala Lumpur: Government Printers.
- Moore, Mick
1984 "Institutional development, the World Bank, and India's new agricultural extension programme." *The Journal of Development Studies* 20 (4):301-317.
- Mosher, A. T.
1966 *Getting Agriculture Moving*. New York: Praeger Publishers.

- Mukherjee, Dilip
1984 "A Supplement on Malaysia Agriculture and Industry."
Asian Wall Street Journal Weekly, July 30(1984):3-6.
- Muzafar, Chandra
1979 Protector: An Analysis of the Concept and Practices of
Loyalty in Leader-Led Relationships within Malay Society.
Penang, Malaysia: Aliran.
- Nagata, Judith
1974 "Urban interlude: Some aspects of internal migration in
West Malaysia." International Migration Review 8:302-
324.
- Narayanan, S.
1975 "Urban in-migration and urban labor absorption: A study
of metropolitan urban Selangor." An unpublished Masters
thesis, University of Malaya, Kuala Lumpur, Malaysia.
- Ness, Gayl D.
1967 Bureaucracy and Rural Development in Malaysia: A Study
of Complex Organizations in Stimulating Economic
Development in New States. Berkeley: University of
California Press.
- Newby, Howard
1983 "The sociology of agriculture: Toward a new rural
sociology." Annual Review of Sociology 9:67-81.
- Norusis, Marija J.
1985 SPSS^x: Advanced Statistics Guide. New York: McGraw-
Hill Book Company.
- Parsons, Talcott
1951 The Social System. New York: The Free Press.

1977 Social Systems and the Evolution of Action Theory. New
York: The Free Press.
- Patnaik, Utsa
1979 "Neo-populism and Marxism: The Chayanovian view of
agrarian question and its fundamental fallacy." Journal
of Peasant Studies 6 (4):375-420.
- Peacock, Frank
1979 "Failure of rural development in Peninsular Malaysia."
Pp. 375-395 in J. C. Jackson and Martin Rudner (eds.),
Issues in Malaysian Development. Kuala Lumpur:
Heinemann Asia Ltd.

- Pearse, Andrew
1980 Seeds of Plenty, Seeds of Want. Oxford: Clarendon Press.
- Pedhazur, Elazar J.
1982 Multiple Regression in Behavioral Research. Second Edition. New York: CBS College Publishing.
- Perez, Lisandro
1979 "The human ecology of rural areas: An appraisal of a field study with suggestions for a synthesis." Rural Sociology 44 (3):584-601.
- Petersen, William
1969 Population. London: Macmillan Company.
- Portes, Alejandro
1978 "Migration and underdevelopment." Politics and Society 8 (1):1-48.
- Prasad, S. B. and A. C. Johnson
1964 "Residential mobility of the retired industrial workers." Land Economics 40:220-223.
- Provencher, Ronald
1976 "Shift in the cycle of experience: Malay perceptions of migration." Pp. 63-71 in D. Guillet and D. Uzzel (eds.), New Approaches to the Study of Migration. Houston: Rice University Press.
- Pryor, Robin J.
1979 Migration and Development in South-East Asia: A Demographic Perspective. Kuala Lumpur: Oxford University Press.
- Purcell, Victor
1965 Malaysia: London: Thames and Hudson Ltd.
- Rhode, I. R.
1970 Imperialism and Underdevelopment. New York: Monthly Review Press.
- Ritchey, Neal P.
1976 "Explanation of migration." Annual Review of Sociology 2:363-404.
- Rossi, Peter H.
1972 "Community Social Indicators." Pp. 87-125 in Angus Campbell and P. E. Converse (eds.), The Human Meaning of Social Change. New York: Russell Sage Foundation.

- 1980 Why Families Move (Second Edition). Beverly Hills: Sage Publication.
- Rudner, Martin
1979 "Agricultural policy and peasant social transformation in late Colonial Malaya." Pp. 7-68 in J. C. Jackson and Martin Rudner (eds.), Issues in Malaysian Development. Kuala Lumpur: Heinemann Asia Ltd.
- Said, Muhammad Ikmal
1985 The Evolution of Large Paddy Farms in the Muda Area, Kedah: A Study of the Development of Capitalist Farms in Peninsular Malaysia. Monograph series No. 8, Center for Policy Research, Universiti Sains Malaysia, Penang, Malaysia.
- Sajilan, Sulaiman
1985 "Teaching competencies needed by extension workers in transferring new technologies to farmers in Malaysia." An unpublished Masters thesis, Iowa State University, Ames, Iowa.
- Salih, Kamal
1978 "Land development." Pp. 68-75 in Asiah A. Samah, K. Jegadeva, M. Yaacob, and V. V. George (eds.), Progress and Development in Malaysia. Kuala Lumpur: Percetakan Tinngi Sdn. Bhd.
- Saunders, Graham
1977 The Development of a Plural Society in Malaya. Kuala Lumpur: Longman Malaysia Sdn. Bhd.
- Scott, James C.
1983 "Api kecil dalam pertentangan kelas." Kajian Malaysia 1 (1):62-94.
- Selvadurai, S.
1972 Padi Farming in West Malaysia. Kuala Lumpur: Ministry of Agriculture and Fisheries.
- 1978 Agriculture in Peninsular Malaysia. Kuala Lumpur: Ministry of Agriculture.
- Selvaratnam, V. and B. W. Dissanayake
1979 "Migration and development with reference to employment, income and migration in Negri Sembilan Timur." Pp. 15-43 in BAR Mokhzani (ed.), Rural Development in Southeast Asia. Delhi: Vikas Publishing House Private Ltd.

- Shari, Ishak and J. K. Sundaram
1982 "Malaysia's green revolution in rice farming: Capital accumulation and technological change in peasant society." Pp. 225-254 in Geoffrey B. Hainsworth (ed.), Village Level Modernization in Southeast Asia: The Political Economy of Rice and Water. Vancouver: University of British Columbia Press.
- Shaw, Paul R.
1975 Migration Theory and Fact: A Review and Bibliography of Current Literature. Philadelphia: Regional Science Research Institute.
- Sherif, M.
1967 Social Interaction: Processes and Product. Chicago: Aldine.
- Sherif, M. and C. W. Sherif
1969 Social Psychology. New York: Harper and Row.
- Shryock, H. S. Jr.
1964 Population Mobility within the United States. Chicago: Community and Family Study Center, University of Chicago.
- Shukur Kassim, D. S. Gibbons, Lim Teck Ghee and Mustafa Najimuddin
1983 Study of Strategy, Impact and Future of Integrated Agricultural Development Projects: Final Report, Volume I. Center for Policy Research, Universiti Sains Malaysia, Penang, West Malaysia.
- Shukur Kassim, D. S. Gibbons and Halimah Todd
1984 Poor Malays Speak Out. Kuala Lumpur: Marican and Sons (Malaysia) Sdn. Bhd.
- Shukur Kassim and Aziz Tahar
1984 "Pembangunan Pertanian Bersepadu di dalam konteks Dasar Ekonomi Baru." Kertas kerja di bentang di Seminar Pembangunan Pertanian Bersepadu, 4-5 Disember, 1984, di Universiti Sains Malaysia, Penang, Malaysia.
- Simmons, A., S. Diaz-Briquets, and A. J. Laquian
1977 Social Change and Internal Migration: A Review of Research Findings from Africa, Asia, Latin America. Ottawa: International Development Research Center.
- Siwar, Chamhuri
1976 Kehendak dan Bentok Reformasi Tanah di Malaysia. Kuala Lumpur: Dewan Bahasa dan Pustaka.

- Sjaastad, L. A.
1962 "The cost and returns of human migration." *Journal of Political Economy* 70:80-93.
- Snodgrass, Donald R.
1980 *Inequality and Economic Development in Malaysia*. Kuala Lumpur: Oxford University Press.
- Sofranko, A. J. and James D. Williams
1980 "Motivation and migration decision." Pp. 45-66 in A. J. Sofranko and J. D. Williams (eds.), *Rebirth of Rural America: Rural Migration in the Midwest*. Ames, Iowa: North Central Regional Center for Rural Development.
- Speare, Alden Jr.
1974 "Residential satisfaction as an intervening variable in residential mobility." *Demography* 11:173-178.
- Stockdale, Jerry D.
1982 "Who will speak for agriculture?" Pp. 317-327 in Don A. Dillman and Daryl J. Hobbs (eds.), *Rural Society in the U.S.: Issues for the 1980s*. Boulder: Westview Press.
- Sulaiman, Aminuddin
1981 "A Multivariate model of rural mobility in Peninsular Malaysia." An Unpublished Ph.D. dissertation, Syracuse University, New York.
- Suratman, M. S. and Patrick Guinness
1977 "The changing focus of transmigration." *Bulletin of Indonesian Economic Studies* 13 (2):78-101.
- Swift, M. G.
1967 "Economic concentration and Malay peasant society." Pp. 241-269 in M. Freedman (ed.), *Social Organization: Essays Presented to Raymond Firth*. Chicago: Aldine.
- 1965 *Malay Peasant Society in Jelebu*. London: Athlone Press.
- Taeuber, K. E. and A. R. Taeuber
1965 "The changing characteristics of Negro migration." *American Journal of Sociology* 75:429-441.
- Tapinos, George and Phyllis T. Piotrow
1978 *Six Billion People: Demographic Dilemmas and World Politics*. New York: McGraw-Hill Company.
- Tarver, J. D.
1961 "Predicting migration." *Social Forces* 39:207-214.

- Taylor, Donald C.
 1981 The Economics of Malaysian Paddy Production and Irrigation. Bangkok: The Agricultural Development Council.
- Todaro, Michael P.
 1976 Internal Migration in Developing Countries: A Review of Theories, Evidence, Methodology, and Research Priorities. Geneva: International Labor Organization.
- 1977 Economic Development in the Third World. Second Edition. London: Longman.
- Townsend, P.
 1979 Poverty in the United Kingdom. Harmondsworth: Penguin.
- Ulack, Richard
 1979 "The impact of migration on Illigan city, Mindanao." Pp. 244-250 in Robin J. Pryor (ed.), Migration and Development in South-East Asia: A Demographic Perspective. Kuala Lumpur: Oxford University Press.
- Utusan Malaysia
 1985 "Seberang Perak dipilih estet padi terbesar." Utusan Malaysia, March 16 (Sabtu):17.
- Vreeland, Nena, Glen B. Dana, G. B. Hurwitz, P. Just, P. W. Moeller, and R. S Shinn
 1977 Area Handbook for Malaysia. Washington, D. C.: United States Government Printing Office.
- Wan Hashim
 1984 Petani dan Persoalan Agraria. PJ, Selangor: Fajar Bakti Sdn. Bhd.
- Webster, Andrew
 1984 Introduction to the Sociology of Development. London: Macmillan Publishers Ltd.
- Wernstedt, F. L. and P. D. Simkins
 1965 "Migration and the settlement of Mindanao." Journal of Asian Studies 25 (1):83-103.
- Wikramatileke, R.
 1965 "State aided rural land colonization in Malaysia: An appraisal of the FLDA program." Annals of the Association of American Geographers 55 (3):377-403.
- Wilson, P. J.
 1967 A Malay Village and Malaysia. New Haven: Hraf Press.

- Winstedt, R. O.
 1962 The Malays: A Cultural Heritage. London: Routledge and Kegan Paul.
- Wolpert, Julian
 1965 "Behavioral aspects of the decision to migrate." The Regional Science Association 15:159-169.
- Yassin, S. M., Irene Beavers and Ibrahim Mamat
 1984 Improving Extension Strategies for Rural Development Serdang, Malaysia: Universiti Pertanian Malaysia Press.
- Young, Kevin, P. Hassan and W. C. F. Bussink
 1980 Malaysia: Growth and Equity in Multiracial Society. Baltimore: Johns Hopkins University Press.
- Young, Mei Ling
 1978 "Migration and Employment: A case study of a rural settlement within a development scheme in Peninsular Malaysia." Pp. 1-23 in Kamal Salih (ed.), Rural-Urban Transformation and Regional Underdevelopment: The Case of Malaysia. UNCRD Project 505 -- Rural-Urban Relations, Asian Perspective on Theory and Strategy of Rural Development. Nagoya, Japan: United Nations Center for Research and Development.
- Zetterberg, Hans L.
 1954 On Theory and Verification in Sociology. New York: Tressler.

ACKNOWLEDGEMENTS

The author wishes to express his gratitude and appreciation to the following institutions and individuals for making this study and his graduate program at Iowa State University possible. Without their contributions and continuing support, the completion of both tasks may not have materialized on time.

Universiti Sains Malaysia which represents the government of Malaysia for granting me a fully-paid study leave to pursue a Ph.D. program at Iowa State University. For all the expenses provided throughout my four-year program, I am very thankful.

The Center for Policy Research, Universiti Sains Malaysia for providing personnel and facilities for gathering and processing the data for the study.

Professor H. C. Chang, my major professor who has been my academic advisor since I first came to ISU. Professor Chang has also served as the chairman of my thesis-equivalency committee. For his constant guidance, counsel, and deliberation, in particular during the writing of this dissertation, I wish to express my deep and heartfelt gratitude. His encouragement kept me going, especially during difficult times.

Associate Professor Frederick O. Lorenz for his time and guidance, particularly in the analysis of the data. For his service on my POS committee, I express my thanks.

Professor Charles L. Mulford not only serves as a member of my POS committee, but has also served as a committee member of my thesis-equivalency committee. For all his contributions I express my

appreciation.

Professor Mushtaq-ur-Rahman from the Geography Department is also a member of my POS committee. Professor Rahman has enlightened me with his experience in rural development. For all his contributions, I express my heartfelt appreciation.

Professor Lehman Fletcher from the Economics Department is another member of my POS committee. Professor Fletcher has helped widen my understanding of economic development planning. For all the contributions and guidance, I thank you.

Dr. Leslie D. Wilcox has served as another member of my thesis-equivalency committee. For his encouragement and suggestions, I wish to express deep gratitude.

At the Center for Policy Research, a number of my colleagues read and provided useful comments on my initial proposal. For their efforts, I express my appreciation.

While undergoing my study program at ISU, many people have helped create a pleasant environment for my study. Some have directly contributed to my dissertation work. To Rogelio Saenz, one from a group of graduate students who has been my constant 'pal' since I came to Iowa State University. I wish to express my gratitude for the programming work rendered. It is impossible to list all of those who have helped me while I have been at Iowa State University. I wish to express my appreciation to them.

Encik Mansur Abdullah and Cik Hasniah Yahya, research technicians from the Center for Policy Research, have provided full-time assistance

during the data collection period. For their help and contributions I extend my deepest gratitude.

Encik Johari Bakar, Encik Mansur Hassan, and Cik Sha'rani helped me in the interviewing process. To them I wish to express my thanks.

Mrs. Beth Coon who has proof-read and edited the dissertation, I wish to extend my special thanks. However, all shortcomings in the interpretation of the results are due to me alone.

Rebecca Shivers has excellently typed this manuscript. To her I express my gratitude.

Finally, I wish to express my deepest and heartfelt gratitude to my wife, Puan Hasnah Haji Hassan and three sons, Aswad Haykal, Afeez Nawfal, and Akmal Huzaifah, for their continuing patience, tolerance, and sacrifice, particularly during the final eight months of my study program when they remained behind in West Malaysia. Their perseverance and understanding are appreciated.

APPENDIX A: STATEMENTS USED FOR ATTITUDINAL VARIABLES

Statements used for attitudinal variables

1) Perceived social integration (Y_1)

- i) Members of this community do not subscribe to the idea of self-interest.
- ii) Members of this community live harmoniously and cooperatively among themselves.
- iii) Our community leaders have always performed their duties and services efficiently and with dedication.
- iv) Willingness to get involved in village community activities is the responsibility of all members of the village community.
- v) Those who have always participated in all village community activities are considered as respectful persons.
- vi) Those who have always participated in village community activities are good citizens.

2) Perceived political participation (Y_2)

- i) All farmers like you should join desirable political party at the local level.
- ii) By being active in political party, certain benefits will be assured of.
- iii) When there is more than one political ideology or party, the community suffer a lot of conflicts and frictions.

3) Perceived access to development accelerators (Y_3)

- i) The opportunity to improve and expand agricultural activities in this location is very great.
- ii) Assistance offered to farmers in this area has been delivered very fairly.
- iii) Agricultural technicians are easy to contact and are always available when their advisory services are needed.

4) Perceived kinship closeness (X_5)

- i) While confronting any hardships or difficulties, the only source for getting assistance is our own kins or relatives.
- ii) Within your present state of condition, your relationship with your richer as well as your poorer relatives is unconditionally very satisfactory.
- iii) To rent in or rent out farmland from or to relatives is better than renting in or renting out farmland to others.

Note:

A five-point Likert scale is used to ascertain the respondents level of agreement to all of the above statements. The response scale are:

- 1) Strongly agree (5)
- 2) Agree (4)
- 3) Undecided (3)
- 4) Disagree (2)
- 5) Strongly disagree (1)

APPENDIX B: SUPPLEMENTARY TABLES

Table 1a. Descriptive statistics for the migrants' characteristics before and after migration

Characteristics ^a	Mean	Variance	Standard Deviation	Kurtosis	Skewness	Minimum	Maximum	Range
MSOCINT1 (Y ₁)	23.08 (24.67)	5.73 (5.60)	2.39 (2.37)	0.28 (2.45)	0.25 (-1.14)	18 (17)	30 (30)	12 (13)
MPOPART1 (Y ₂)	10.86 (11.62)	2.51 (2.24)	0.58 (1.50)	0.33 (2.86)	-0.08 (61.02)	6 (6)	15 (15)	9 (9)
MACDEAC1 (Y ₃)	11.51 (13.58)	2.21 (2.17)	1.45 (1.67)	-0.28 (-0.25)	-0.07 (-0.75)	8 (9)	15 (15)	7 (6)
MIGPOVST (Y ₄)	0.75 (0.43)	0.27 (0.07)	0.52 (0.27)	0.33 (8.74)	0.86 (2.62)	0.00 (0.16)	2.38 (1.67)	2.38 (1.51)
EDUCATT (X ₁)	3.48	9.95	3.15	-1.76	-0.12	0	9	9
MIGAGE (X ₂)	30.82 (43.95)	122.70 (113.60)	11.08 (10.66)	-0.58 (-0.65)	0.34 (0.29)	8 (23)	61 (72)	53 (49)
MIGDECH (X ₃)	3.06 (4.36)	7.17 (4.82)	2.68 (2.20)	-0.53 (0.69)	0.51 (0.51)	0 (0)	2.38 (12)	2.38 (12)
MIGTOFA (X ₄)	5.51 (2.73)	7.97 (4.28)	2.82 (2.07)	0.49 (0.25)	0.34 (0.40)	0 (0)	11 (10)	11 (10)
MKINSHPI (X ₅)	9.93 (9.50)	3.52 (3.93)	1.88 (1.98)	-0.16 (-0.89)	-0.45 (-0.19)	5 (5)	14 (13)	9 (8)

^aThe definition of the variables or characteristics can be found on pages 110-111. Figures in parentheses are figures for the period after the migration process.

Table 1a. (continued)

Characteristics	Mean	Variance	Standard Deviation	Kurtosis	Skewness	Minimum	Maximum	Range
MIGFOPSZ (X_6)	1.04 (1.43)	1.65 (0.29)	1.29 (0.54)	24.40 (6.79)	4.02 (2.36)	0 (0.81)	9.99 (4.05)	9.99 (3.24)
MIGLTSTA (X_7)	2.67 (3)	0.41 (0)	0.64 (0)	1.75 (-)	-1.75 (-)	1 (3)	3 (3)	2 (0)
MIGFEMST (X_8)	1.53 (1.50)	0.33 (0.29)	0.58 (0.54)	-0.68 (-1.06)	0.53 (0.39)	1 (1)	3 (3)	2 (2)
MIGPAMSH (X_9)	1.93 (1.91)	0.07 (0.08)	0.26 (0.29)	9.91 (6.60)	-3.42 (-2.91)	1 (1)	1 (1)	2 (2)

Table 1b. Descriptive statistics for the non-migrants' characteristics before and after migration

Characteristics ^a	Mean	Variance	Standard Deviation	Kurtosis	Skewness	Minimum	Maximum	Range
MSOCINT1 (Y ₁)	26.65 (24.60)	2.29 (2.71)	1.51 (1.65)	4.95 (30.1)	-0.31 (-0.08)	29 (29)	18 (18)	11 (11)
MPOPART1 (Y ₂)	11.17 (10.82)	4.10 (5.28)	2.03 (2.30)	1.42 (-0.03)	01.26 (-0.85)	4 (4)	15 (15)	11 (11)
MACDEAC1 (Y ₃)	8.54 (13.10)	3.71 (0.47)	1.93 (1.21)	-0.70 (-0.16)	0.45 (-0.34)	4 (10)	13 (15)	9 (5)
MIGPOVST (Y ₄)	1.28 (0.85)	0.66 (0.65)	0.81 (1.38)	3.98 (9.24)	0.74 (2.79)	0.30 (0.20)	4.76 (4.17)	4.36 (3.97)
EDUCATT (X ₁)	4.14	8.32	2.90	-1.34	-0.69	0	9	9
MIGAGE (X ₂)	39.41 (54.50)	86.18 (93.47)	9.28 (9.67)	0.72 (-0.64)	0.55 (0.32)	18 (38)	69 (81)	51 (43)
MIGDECH (X ₃)	4.18 (3.62)	5.22 (4.97)	2.29 (2.23)	-0.36 (-0.65)	0.52 (0.68)	0 (0)	10 (10)	10 (10)
MIGTOFA (X ₄)	4.66 (4.10)	5.36 (9.15)	2.32 (2.48)	0.21 (0.21)	0.82 (0.54)	0 (0)	11 (11)	11 (11)

^aThe definition of the variables or characteristics can be found on page 110-111. Figures in parentheses are figures for the period after the migration process.

Table 1b. (continued)

Characteristics	Mean	Variance	Standard Deviation	Kurtosis	Skewness	Minimum	Maximum	Range
MKINSHPI X_5	13.24 (13.28)	1.34 (1.30)	1.16 (1.14)	4.35 (4.98)	-1.29 (-1.41)	8 (8)	15 (15)	7 (7)
MIGFOPSZ (X_6)	1.84 (1.74)	1.79 (1.76)	1.34 (1.33)	2.65 (3.20)	1.39 (1.47)	0.29 (0)	7.29 (7.29)	7.00 (7.29)
MIGLTSTA (X_7)	(2.98) (2.98)	(0.04) (0.04)	(0.20) (0.20)	(100.00) (100.00)	(-10.00) (-10.00)	(1) (1)	(3) (3)	(2) (2)
MIGFEMST (X_8)	1.29 (1.22)	0.23 (0.21)	0.48 (0.46)	0.19 (3.23)	1.22 (1.98)	1 (1)	3 (3)	2 (2)
MIGPAMSH (X_9)	1.20 (1.22)	0.16 (0.17)	0.40 (0.42)	0.33 (-0.12)	1.52 (1.37)	1 (1)	1 (1)	2 (2)

Table 1c. The characteristics and status changes between migrants and non-migrants before and after the migration from district to Trans-Perak

Characteristics	MIGRANTS (N=100)			NON-MIGRANTS (N=100)		
	Before (T ₁)	After (T ₂)	Status change	Before (T ₁)	After (T ₂)	Status change
	%	%		%	%	
1) Marital status						
Single	22.0	0.0	-22	0.0	0.0	0
Divorced	0.0	1.0	+ 1	0.0	6.0	+ 6
Married	78.0	99.0	+21	100.0	94.0	- 6
2) Family type						
Nuclear	86.0	94.0	+ 8	100.0	83.0	-17
Extended	14.0	6.0	- 8	0.0	17.0	+17
3) Political commitment						
Committed	9.0	11.0	+ 2	87.0	85.0	- 2
Uncommitted	91.0	89.0	- 2	13.0	15.	+ 2
4) Political role						
None	91.0	89.0	- 2	13.0	15.0	+ 2
Ordin. member	3.0	7.0	+ 4	76.0	69.0	- 7
Comm. member	5.0	4.0	- 1	9.0	13.0	+ 4
Exec. Comm. member	1.0	0.0	- 1	2.0	3.0	+ 1
5) Community involvement						
No	28.0	14.0	-14	83.0	15.0	-68
Yes	72.0	86.0	+14	17.0	85.0	+68

Table 1c. (continued)

Characteristics	MIGRANTS (N=100)			NON-MIGRANTS (N=100)		
	Before (T ₁)	After (T ₂)	Status change	Before (T ₁)	After (T ₂)	Status change
	%	%		%	%	
6) Village devel. comm. member						
No	84.0	81.0	- 3	15.0	82.0	+67
Yes	16.0	19.0	+ 3	85.0	18.0	-67
7) Farm employment status						
Unemployed	13.0	2.0	-11	2.0	6.0	+ 4
Part-time	48.0	51.0	+ 3	27.0	20.0	- 7
Full-time	39.0	47.0	+ 8	71.0	74.0	+ 3
8) Community opinion leader						
No	48.0	24.0	-24	15.0	16.0	+ 1
Yes	52.0	76.0	+24	85.0	84.0	- 1
9) Off-farm employment status						
Unemployed	51.0	52.0	+ 1	72.0	80.0	+ 8
Part-time	45.0	46.0	+ 1	27.0	18.0	- 9
Full-time	4.0	2.0	- 2	1.0	2.0	+ 1

Table 1c. (continued)

Characteristics	MIGRANTS (N=100)			NON-MIGRANTS (N=100)		
	Before (T ₁)	After (T ₂)	Status change	Before (T ₁)	After (T ₂)	Status change
	%	%		%	%	
10) Land development application						
No	86.0	56.0	-30	70.0	97.0	+27
Yes	14.0	44.0	+30	30.0	3.0	-27
11) Land development offer						
No	98.0	94.0	- 4	95.0	100.0	+ 5
Yes	2.0	6.0	+ 4	5.0	0.0	- 5
12) Receiving input subsidy						
No	100.0	16.0	-84	100.0	1.0	-99
Yes	0.0	84.0	+84	0.0	99.0	+99
13) Receiving agric. credit						
No	100.0	26.0	-74	100.0	30.0	-70
Yes	0.0	74.0	+74	0.0	70.0	+70
14) Receiving agric. advice						
No	100.0	19.0	-81	100.0	1.0	-99
Yes	0.0	81.0	+81	0.0	99.0	+99

Table 1c. (continued)

Characteristics	MIGRANTS (N=100)			NON-MIGRANTS (N=100)		
	Before (T ₁)	After (T ₂)	Status change	Before (T ₁)	After (T ₂)	Status change
	%	%		%	%	
15) Local development orgn. application						
No	96.0	57.0	-39	85.0	16.0	-69
Yes	4.0	43.0	+39	15.0	84.0	+69
16) Local development orgn. offered						
No	96.0	62.0	-34	85.0	16.0	-69
Yes	4.0	38.0	+34	15.0	84.0	+69
17) Perceived poverty status						
Very poor	1.0	0.0	- 1	0.0	0.0	0
Poor	65.0	16.0	-79	15.0	1.0	-14
Subsistence-level	28.0	74.0	+46	53.0	47.0	- 6
Well-off	4.0	10.0	- 6	32.0	52.0	+20
18) Land tenure						
Owner-operator	14.0	89.0	+75	35.0	42.0	+ 7
Owner-tenant	59.0	10.0	-49	8.0	8.0	0
Tenant	3.0	1.0	- 2	56.0	49.0	- 7
Agric. laborer	15.0	0.0	-15	0.0	0.0	0
Not farming	9.0	0.0	- 9	1.0	1.0	0

Table 2a. Cross-tabulation between respondent category and age (T_1)

Age Range (years)	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
≤ 19	16.0	16.0	2.0	2.0
20-29	35.0	51.0	9.0	11.0
30-39	26.0	77.0	48.0	59.0
40-49	16.0	93.0	29.0	88.0
50-59	6.0	99.0	9.0	97.0
≥ 60	1.0	100.0	3.0	100.0
<hr/>				
X = 100		Std. Dev. = 1.08	X = 100	
\bar{X} = 30.82			\bar{X} = 39.41	

Table 2b. Cross-tabulation between respondent category and age (T_2)

Age Range (years)	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
≤ 29	7.0	7.0	0.0	0.0
30-39	34.0	41.0	2.0	2.0
40-49	28.0	69.0	33.0	35.0
50-59	22.0	91.0	30.0	65.0
60-69	8.0	99.0	28.0	93.0
≥ 70	1.0	100.0	7.0	100.0
<hr/>				
X = 100		Std. Dev. = 1.66	X = 100	
\bar{X} = 43.95			\bar{X} = 54.50	

Table 3a. Cross-tabulation between respondent category and farm size (T_1)

Farm Size (ha.)	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
0	23.0	23.0	0.0	0.0
0.01-0.58	21.0	44.0	23.0	23.0
0.59-1.15	24.0	68.0	16.0	39.0
1.16-1.73	17.0	85.0	21.0	60.0
1.74-2.30	6.0	91.0	5.0	65.0
2.31-2.87	3.0	94.0	16.0	81.0
≥ 2.88	6.0	100.0	19.0	100.0
X = 100	Std. Dev. = 1.29		X = 100	Std. Dev. = 1.34
$\bar{X} = 1.04$			$\bar{X} = 1.84$	

Table 3b. Cross-tabulation between respondent category and farm size (T_2)

Farm Size (ha.)	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
0	0.0	0.0	3.0	3.0
0.01-0.58	0.0	0.0	22.0	25.0
0.59-1.15	6.0	6.0	15.0	40.0
1.16-1.737	4.0	80.0	20.0	60.0
1.74-2.30	13.0	93.0	9.0	69.0
2.31-2.87	4.0	97.0	16.0	85.0
≥ 2.88	3.0	100.0	15.0	100.0
X = 100	Std. Dev. = 0.54		X = 100	Std. Dev. = 1.33
$\bar{X} = 1.43$			$\bar{X} = 1.74$	

Table 4a. Cross-tabulation between respondent category and net seasonal (six month) income (T_1)

Income Malaysian	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
≤ 400	23.0	23.0	4.0	4.0
401-600	64.0	87.0	21.0	25.0
601-800	5.0	92.0	9.0	34.0
801-1000	3.0	95.0	18.0	52.0
1001-1200	1.0	96.0	12.0	64.0
≥ 1201	4.0	100.0	36.0	100.0
<hr/>				
X = 100	Std. Dev. = 371.50		X = 100	Std. Dev. = 645.74
\bar{X} = \$534.50			\bar{X} = \$1203.50	

Table 4b. Cross-tabulation between respondent category and net seasonal (six month) income (T_2)

Income Malaysian	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
≤ 400	0.0	0.0	0.0	0.0
401-600	18.0	18.0	8.0	8.0
601-800	56.0	74.0	16.0	24.0
801-1000	10.0	84.0	10.0	34.0
1001-1200	9.0	93.0	15.0	49.0
≥ 1201	7.0	100.0	51.0	100.0
<hr/>				
X = 100	Std. Dev. = 366.10		X = 100	Std. Dev. = 705.48
\bar{X} = \$869.00			\bar{X} = \$1473.50	

Table 5a. Cross-tabulation between respondent category and poverty status (T_1)

Proportion of per cap. poverty income line	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
≤ 0.25	9.0	9.0	0.0	0.0
0.26-0.50	37.0	46.0	11.0	11.0
0.51-0.75	19.0	55.0	18.0	29.0
0.76-0.99	8.0	63.0	12.0	41.0
1.00-1.25	7.0	70.0	23.0	64.0
1.26-1.50	16.0	86.0	13.0	77.0
≥ 1.51	4.0	100.0	23.0	100.0
$X = 100$ Std. Dev. = 0.52 $X = 100$ Std. Dev. = 0.81 $\bar{X} = 0.75$ $\bar{X} = 1.28$				

Table 5b. Cross-tabulation between respondent category and poverty status (T_2)

Proportion of per cap. poverty income line	Respondent Category			
	Migrant		Non-Migrant	
	Absol. %	Cummul. %	Absol. %	Cummul. %
≤ 0.25	24.0	24.0	2.0	2.0
0.26-0.50	52.0	76.0	25.0	27.0
0.51-0.75	17.0	93.0	36.0	63.0
0.76-0.99	3.0	96.0	15.0	68.0
1.00-1.25	1.0	97.0	78.0	78.0
1.26-1.50	1.0	99.0	2.0	80.0
≥ 1.51	2.0	100.0	20.0	100.0
$X = 100$ Std. Dev. = 0.52 $X = 100$ Std. Dev. = 0.81 $\bar{X} = 0.75$ $\bar{X} = 1.28$				

Table 6. Pooled within-groups correlation matrix

	Y_1^a	X_2	X_3	X_4	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9
Y_1	1.000												
X_2	0.228	1.000											
X_3	0.316	0.137	1.000										
X_4	0.041	0.035	-0.080	1.000									
X_1	0.059	0.174	0.089	0.031	1.000								
X_2	0.059	0.052	-0.059	-0.091	-0.276	1.000							
X_3	0.021	0.092	0.082	-0.405	-0.107	0.486	1.000						
X_4	0.107	0.176	0.019	0.076	0.196	-0.060	-0.033	1.000					
X_5	0.116	-0.073	0.239	-0.124	0.011	0.020	-0.006	0.159	1.000				
X_6	0.064	0.116	0.107	0.359	0.037	0.201	0.387	0.092	-0.001	1.000			
X_7	0.085	0.163	0.149	0.105	-0.158	0.319	0.277	0.013	0.063	0.303	1.000		
X_8	-0.065	0.026	0.096	0.127	-0.118	0.305	0.219	-0.094	0.102	0.272	0.553	1.000	
X_9	0.049	-0.440	-0.107	0.041	-0.113	0.065	-0.115	-0.002	0.122	-0.003	0.035	0.072	1.000

^aThe definition of the variables can be found on pages 110-111.

APPENDIX C: INTERVIEW SCHEDULE TO GENERATE THE DATA

The Sociology of Agricultural Development
in West Malaysia: An Analysis of
Peasant Producers' Rural-Rural Migration
within the Context of Integrated
Agricultural Development Setting

(Interview Schedule)

Enumerator's name: _____ Date of interview _____

1 - Serial No: 1 3

2 - Respondent's Name: _____

3 - Respondent's category:

4 - Sex:

1 - Migrant

4

1 - Male

5

2 - Non-migrant

2 - Female

5 - Address: i - Place of origin

ii - Place of destination

Village/Sector _____

Mukim/Block _____

District _____

State _____

6

7

6 - Age: Date of birth _____ 7 - Migration date: _____ 8 9

i - During migration

ii - Present age

1 - 10 - 19

1 - 20 - 29

2 - 20 - 29

2 - 30 - 39

3 - 30 - 39

3 - 40 - 49

10 11

12 13

4 - 40 - 49

4 - 50 - 59

5 - 50 - 59

5 - 60 - 69

6 - 60+

6 - 70+

8 - Marital Status:

i - During migration

ii - Presently

1 - Single

2 - Married

14

15

3 - Divorce

9 - Total number of dependent children:

i - During migration

16 17

ii - Presently

18 19

10 - Level of educational attainment:

1 - Never been to school

2 - Completed elementary school

3 - Completed Junior high school

4 - Completed high school

20

Kinship Relation/Kinship Tie

11 - Total number of households with kinship tie living within the same village or close by:

i - Place of origin

ii - Place of destination

1 - None

2 - 1 - 3

3 - 4 - 6

4 - 7 - 9

5 - 10+

21 22

23 24

12 - Type of family or household

i - Place of origin

ii - Place of destination

2 - Extended family

1 - Nuclear family 25

26

Responses to statements pertinent to kinship relation or kinship tie

13 - While confronting any hardships or difficulties, the only source for getting assistance is our own kins or relatives

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

27

28

- 14 - Within your present state of condition, your relationship with your richer as well as your poorer relatives is unconditionally very satisfactory

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

29 ☐

30 ☐

- 15 - Misunderstanding which could discontinue kinship relation among members of the agricultural community is not an ordinary display of desirable conduct

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

31 ☐

32 ☐

- 16 - To rent in or rent out farmland from or to relatives is better than renting in or renting out farmland from or to others

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

33 ☐

34 ☐

- 17 - There is always a feeling of security and satisfaction while having members of kinship tie living close by

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

35 ☐

36 ☐

Political Participation

18 - Were you/are you a member of any local political party?

i - Place of origin

ii - Place of destination

1 - Ruling Party

2 - Opposition Party

3 - None

37 ☐

38 ☐

19 - If yes, what position did you or do you hold?

i - Place of origin

ii - Place of destination

1 - Ordinary member

2 - Committee member

3 - Executive member

39 ☐

40 ☐

Responses to statements pertinent to political participation

20 - All farmers like you should join desirable political party at the local level

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

41 ☐

42 ☐

21 - Once a member of any political party, attendance in all meetings is a must .

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

43 ☐

44 ☐

22 - All farmers who are members of any political party must be prepared to spend time, energy and money for political activities

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

45 ☐

46 ☐

23 - By being active in political party, certain benefits will be assured of

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

47 ☐

48 ☐

24 - When there is more than one political ideology or party, the community will suffer a lot of conflicts and frictions

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

49 ☐

50 ☐

Social Participation

25 - Have you ever participated in any forms of community activities?

i - Place of origin

ii - Place of destination

2 - Yes

1 - No

51 ☐

52 ☐

26 - Were you/are you a member of Village Development Committee?

i - Place of origin

ii - Place of destination

2 - Yes

53 ☐

54 ☐

1 - No

27 - Were you/are you being invited to give your views regarding the execution of village development projects or activities?

i - Place of origin

ii - Place of destination

2 - Yes

55 ☐

56 ☐

1 - No

Responses to statements pertinent to social participation

28 - Willingness to get involved in village community activities is the responsibility of all members of the village community

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

57 ☐

58 ☐

2 - Disagree

1 - Strongly disagree

29 - Those who have always participated in all village community activities are considered as respectful persons

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

59 ☐

60 ☐

2 - Disagree

1 - Strongly disagree

30 - Those who have always participated in village community activities
are good citizens

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

61 ☐

62 ☐

31 - When social problems such as theft, drug addict, crime, petty quarrel
and miscues arise we must take immediate action to solve them

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

63 ☐

64 ☐

32 - Failure among village community members to cooperate and develop
their village could result in their village to remain backward

i - Place of origin

ii - Place of destination

5 - Strongle agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

65 ☐

66 ☐

Economic Well Being

33 - Land Tenure Status

i - Place of origin

ii - Place of destination

1 - Owner Operator

2 - Owner Tenant

3 - Tenant

4 - Agricultural Labour

5 - Not Farming

6 - Unemployed

67 ☐

68 ☐

34 - Farm size operated

1 Ha = 2.47Ac = 3.47 Relong

i - Place of origin

- 1 - 0 hectare
- 2 - 0.01 - 0.49 ha
- 3 - 0.50 - 0.99 ha
- 4 - 1.00 - 1.49 ha
- 5 - 1.50 - 1.99 ha
- 6 - 2.00 - 2.49 ha
- 7 - 2.50 ha

69 70 71ha

--	--	--

ii - Place of destination

72 73 74ha

--	--	--

35 - Agricultural Employment Status

i - Place of origin

- 3 - Fully employment
- 2 - Underemployed
- 1 - Unemployed

75 ☐

ii - Place of destination

76 ☐

36 - Non-Agricultural Employment Status

i - Place of origin

- 3 - Fully employed
- 2 - Underemployed
- 1 - Unemployed

77 ☐

ii - Place of destination

78 ☐

37 - Could you list the types of non-agricultural employment you were/are involved in (three important employment)

i - Place of origin

_____ 79 ☐
_____ 80 ☐
_____ 81 ☐

ii - Place of destination

_____ 82 ☐
_____ 83 ☐
_____ 84 ☐

38 - In which category that you think you belong?

i - Place of origin

ii - Place of destination

1 - Destitute

2 - Poor

3 - Just enough to sustain life

4 - Very rich

85 ☐

86 ☐

39 - Estimated net seasonal income from all sources

i - Place of origin

ii - Place of destination

1 - <\$600

2 - \$600 - \$ 899

3 - \$900 - \$1199

4 - \$1200 - \$1499

5 - \$1500 - \$1799

6 - \$1800 - \$2099

7 - \$2100 - \$2399

8 - \$2400 - \$2699

9 - \$2700+

87 88 89 90

\$ ☐ ☐ ☐ ☐

91 92 93 94

\$ ☐ ☐ ☐ ☐

40 - Did you ever apply to join government land settlement project while at the:-

i - Place of origin

ii - Place of destination

2 - Yes

1 - No

95 ☐

96 ☐

41 - Were you offered to resettle into government land settlement project while at the:-

i - Place of origin

ii - Place of destination

2 - Yes

1 - No

97 ☐

98 ☐

279

Did you/do you receive any of the following aids:

(Please respond Yes (2) or No (1) for question 42 to 44

- | i.- Place of origin | | ii - Place of destination | |
|---------------------------|------------------------------|------------------------------|--|
| 42 - Input Cash Subsidies | 99 <input type="checkbox"/> | 102 <input type="checkbox"/> | |
| 43 - Agricultural Credit | 100 <input type="checkbox"/> | 103 <input type="checkbox"/> | |
| 44 - Advisory Services | 101 <input type="checkbox"/> | 104 <input type="checkbox"/> | |

45 - What are some of the organizations or institutions which offer agricultural or social services in your area that you are aware of?

- | i - Place of origin | | ii - Place of destination | |
|---------------------|------------------------------|---------------------------|------------------------------|
| _____ | | _____ | |
| _____ | 105 <input type="checkbox"/> | _____ | 106 <input type="checkbox"/> |
| _____ | | _____ | |
| _____ | | _____ | |

46 - Which organizations or institutions that you have applied to be a member?

- | i - Place of origin | | ii - Place of destination | |
|---------------------|------------------------------|---------------------------|------------------------------|
| _____ | | _____ | |
| _____ | 107 <input type="checkbox"/> | _____ | 108 <input type="checkbox"/> |
| _____ | | _____ | |
| _____ | | _____ | |

47 - Which organizations or institutions offered you to be a member?

- | i - Place of origin | | ii - Place of destination | |
|---------------------|------------------------------|---------------------------|------------------------------|
| _____ | | _____ | |
| _____ | 109 <input type="checkbox"/> | _____ | 110 <input type="checkbox"/> |
| _____ | | _____ | |
| _____ | | _____ | |

Responses to statements pertinent to economic well-being

48 - The opportunity to improve and expand agricultural activities in this location is very great

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

111 ☐

112 ☐

49 - Assistance offered to farmers in this area has been delivered very fairly

i - Place of origin

ii - Place of destination

5 - Strongly

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

113 ☐

114 ☐

50 - Agricultural technicians are easy to contact and are always available when their advisory services are needed

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

115 ☐

116 ☐

51 - The conditions and procedures for getting agricultural credit in this area are very appropriate to the current situation

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

117 ☐

118 ☐

- 52 - All farmers, disregarding their political affiliation, should have the opportunity to gain access to the benefits derived from agricultural development

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

119 ☐

120 ☐

Responses to statements pertinent to social integration

- 53 - Members of this community do not subscribe to the idea of self-interest

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

121 ☐

122 ☐

- 54 - Members of this community live harmoniously and cooperatively among themselves

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree.

1 - Strongly disagree

123 ☐

124 ☐

- 55 - Rather than being poor somewhere else, it is better to be poor in our own village

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

125 ☐

126 ☐

56 - The "give and take" attitude among community members can improve members' level of understanding with each other

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

127 ☐

128 ☐

57 - Our community leaders have always performed their duties and services efficiently and with dedication

i - Place of origin

ii - Place of destination

5 - Strongly agree

4 - Agree

3 - Undecided

2 - Disagree

1 - Strongly disagree

129 ☐

130 ☐

58 - Do you intend to migrate form this area?

2 - Yes

1 - No

131 ☐

59 - If No, please state your reasons for the above response

132 ☐ ☐ 133

60 - If Yes, please state your reasons for the above response

134 ☐ ☐ 135

APPENDIX D: COVER LETTER REGARDING THE USE OF HUMAN SUBJECTS



PUSAT PENYELIDIKAN DASAR
UNIVERSITI SAINS MALAYSIA
 CENTRE FOR POLICY RESEARCH

Minden • Pulau Pinang • Malaysia

Telefon: 883822 Ext. 389 Pengarah, 391 Pejabat Am.

Cable: UNISAINS

15 May 1985.

To Whom It May Concern


The Center for Policy Research, Science University of Malaysia which was established in 1974 is responsible for conducting socio-economic and other related development planning research for various government agencies and statutory bodies. The findings and data base ascertain by these research projects are used for policy formulation and implementation purposes. Since its inception, the Center has conducted numerous research projects involving human subjects as a source for ascertaining personal opinion, views, responses and the like in the interview schedules.

Mr. Mohd. Isa Haji Bakar is currently a staff with the Center. His dissertation research which was conducted in West Malaysia and entitled: The Sociology of Agricultural Development in West Malaysia: A Causal Analysis of Peasant Producers' Rural Migration Decision Making within the Context of Integrated Agricultural Development, was carried out under the auspices of this Center.

The Center would like to inform Iowa State University that all information ascertained through his research are considered as confidential and part of the Center's assets. It is also hereby declared that the Center has already taken care of various conditions related to the fairness and appropriate use of human subjects in this research project. The interview schedule has been thoroughly perused and approved for use by the principal researcher.

The Center hopes that the university will allow Mr. Mohd. Isa Haji Bakar to proceed with the data analysis, and thus complete the writing up of his dissertation without much delay.

Thank you.


 (Azmi Hamid)
 Administrative Officer
 ADMINISTRATIVE OFFICER
 CENTER FOR POLICY RESEARCH
 University Science Malaysia
 Minden, Penang.